MILITARY AND NAVAL MAGAZINE

OF THE

UNITED STATES.

VOL. III---NO. 2.---APRIL, 1834.

A brief Essay on the causes of Dry-Rot in public and private ships, and its remedy : by JAMES BARRON, *of the United States Navy.*

OF DRY-ROT AND ITS REMEDY.

The condition in which many of our public and private ships have been found, from the effects of *Dry-Rot*, has for the last thirty years, engaged much of my particular attention, to the important desideratum for remedying the evil, and preserving this branch of our national defence and commercial marine.

There has not been, for many years, an instance of our ships proving deficient in *strength*, consequently their *durability* should be the object of our present inquiry.

After a minute investigation, aided by a long course of observation, and a familiar intercourse with scientific and practical men, I have arrived at the conclusion, that violent extremes of an impure atmosphere, are the cause of the destruction so frequently witnessed in our ships—particularly those in ordinary. Though built of the best materials, and in the best style of workmanship, it is manifest they are not exempt from that species of decay, commonly called Dry-Rot. I have, therefore, considered it a duty to communicate the result of my reflections and experience upon this subject, and the simple mode by which I would propose to obviate this deplorable evil, and at the same time effect the saving of a large amount in this branch of the public expenditure.

The importance of salubrious air in cherishing and preserving vegetable and animal life, is well known both to the scientific and practical observer of causes and effects; and the value of a pure

atmosphere cannot be too highly estimated by nautical men, who, from being continually confined, in large numbers, to very close and circumscribed apartments, are most liable to disease, generated by mephitic air, the fatal consequences of which are so frequently demonstrated in all maritime expeditions.

A strong argument also, as to the deleterious properties of this air, may be drawn from the better health enjoyed by those officers who occupy apartments more remote from this noxious atmosphere, than those of the men, and where a current of pure air is continually expelling the destructive effluvia arising from the cause just mentioned.

Again, the most positive proofs of the destruction occasioned to timber by foul atmosphere, are to be seen in every ship that is found in a decayed state; the best timber connected with the interior, being more or less injured, while that, even of an inferior quality, situated on the exterior, will be found to be comparatively sound.* A particular illustration of this truth is seen also in the excellent preservation in which the cabin furniture and joiners' work of ships, such as berth boards, &c. are found, arising from the free ventilation of those apartments, and their remoteness from the source of the noxious air generated by the bilge water. I would not be understood as ascribing this destructive agency directly to the bilge water itself, for it is well known that those parts of the timbers which are always covered with it, are seldom found decayed, while those immediately above it are most injuriously affected by the noxious air arising from it.

A variety of plans and experiments have been essayed to arrive at the important desideratum for obviating this evil; but I have heard of none that has rewarded its projector with any satisfactory result: agents of various kinds have been resorted to, without success; fire, air, water and various affinities of chymistry, have been employed, without producing any decided opinion, either as to the best means or method of obtaining the desired object.

I have now in possession a machine for ventilating ships by *fire*, and from experiments which I have made with it, I am convinced that this element is by no means so powerful an agent for the purpose, as some writers who have speculated on the subject would assume. Nor are ventilators, depending for their efficacious operation upon the motion of a ship, to be at all relied upon; for it frequently happens, that, from being in smooth water, and the prevalence of calms, they remain inoperative for months together, the impulse they receive not being sufficient to put in motion the most delicate machinery.

Our great object then should be, to discover some agent not

---

* Eight years after the frigate United States was launched, I visited her and found all the materials unconnected with the internal air, (that is, that air between the inside and outside plank) as perfectly sound as they were when I first joined her in '98: I served on board of her for two years, and could readily identify the articles alluded to. At the time I speak of, the United States had undergone one thorough repair and was equally ready for the second.

liable to these objections, nor dependent for its operation upon any other power than one always at command, by means of which the atmosphere in every department of a ship, may be kept at all times in a pure and healthful state. Now it is too evident to require illustration, that as the impure air generated by the bilge water, and secreted between the timbers of a ship, in proximity to this noxious agent, is drawn out, fresh and wholesome air from above will be substituted, (for nature knows no vacuum) and by the frequent repetition of this operation, the whole interior of the ship will be pervaded with a pure and wholesome atmosphere, in place of that so destructive to the lives of the crew, as well as to the timbers of which the ship is constructed.

Every ship or vessel acts, in some degree, as a Hydraulic Bellows, according to the quantity of water allowed to remain in her after the pumps have sucked; for as this water, by the motion of the vessel, rolls from side to side, the air above it, is, by its motion, alternately forced out and drawn in between the timbers; and as this confined air, thus becomes necessarily mixed with pure, fresh air, the timbers are longer preserved, as far as the influence of the latter extends: hence we may infer, that if means were adopted to expel entirely the foul air, thus generated between the two skins, timbers would last much longer than if exposed, as at present, to its destructive action. That small portion of a ship's timber which is covered by the bilge water, generally remains sound, which is a proof that the foul *air* it produces is exclusively the cause of decay; since the part not exposed to its action is preserved, while all that comes within its influence is destroyed. This foul air, the effect of which is commonly called Dry-Rot, is doubtless produced by the action of the bilge water on the timber and the metals of which ships are constructed—else why do those on the stocks, under cover, and free from this water, last much longer than such as are afloat and subject to its operation? If the last fact, in addition to the one above mentioned, viz: that the parts of ships not connected with the internal impure air continue sound, while those exposed to its action are destroyed, were not sufficient proof that it is the agency of the bilge water that produces the evil, an additional and perhaps conclusive proof is found in the circumstance, that if part of the very same kind of timber put into a ship, be employed in the construction of a house,* the latter remains sound, while the former hastens rapidly to decay.

It is true indeed, that vessels on the stocks, constructed of green materials, are often seen suddenly to decay; but this arises from the quantity of moisture in the timber, and the want of careful ventilation, when the external atmosphere is dry and wholesome; and

* Some objections have been made to instituting a comparison between the greater durability of timbers employed in a house than those in a ship, on account of their difference in size. I answer, that many houses in this, as well as in every other civilized country, have a considerable portion of timber in their frames as large as that of ships—viz: the steeples of churches, the beams of state and store houses, &c. none of which show any corresponding degree of decay with those of ships.

the no less necessary precaution of excluding the external air when its temperature is such as to produce an injurious degree of moisture. For it is demonstrated by all experience on the subject, that an impure or moist atmosphere is no less deleterious in its effects on vegetable than on animal life. It may not be irrelevant here to observe, that the tightness of ships is a fruitful cause of the destructive atmosphere of which I am speaking; for there is not an instance of the sudden decay of a ship that has proved leaky the first three or four years of her running; and this can only be accounted for by the continual use of her pumps, constantly admitting a quantity of pure water, and again removing it before it can become impregnated with the properties of the wood and the metalic substances, from which it derives its destructive qualities.

Having, as I conceive, established the fact, that the preservation of our ships, and the health of their crews, will be secured by providing a remedy against the destructive effects of the mephitic air generated in the hold by bilge water, I proceed to state, as the result of my experience and observation, that the use of AIR PUMPS in Summer, and AIR PUMPS and STOVES in Winter, will effectually accomplish this desirable end, provided our ships shall be constructed as hereinafter recommended.

The Air Pump I propose, is in the form of a Blacksmith's Bellows, (see plate) but may be varied in this particular, as convenience or arrangement may suggest, the principle of its operation being retained. The criterion for working it should be the state of the atmosphere below, to be determined by the proper instruments;—and by the operation of the proposed exhauster, the air below should be made to correspond constantly with that on the upper deck of the ship.

The following explanation of the plate will be found clearly to describe the properties and uses of the Pump, or Bellows:

A. The Bellows, that may be made in any form; perhaps that in common use by Blacksmiths may prove the most convenient.

B. The Deck; the Bellows may be placed on the most convenient deck; that under the lower gun deck of all ships, will be the most favorable for their preservation.

C. Communicating pipe; this pipe is to be firmly attached to the deck on which the Bellows stands, and the Bellows connected with it by an elastic leather Hose, and worked by its underside, as those in use by Blacksmiths usually are. Ships already built, may be advantageously ventilated by using only the pipe C.

D. The Keelson; to the side of which the cylinder E. is to be secured.

E. The main Cylinder; which may be made in two, three or more pieces, according to the length of the ship, and must be closed at their ends; for it is all-important to direct the whole force of the Bellows to drawing off the air from between the timbers. Of course, this will constantly introduce the pure air in proportion to the quantity of foul thus expelled: the cylinder should be three or four inches in diameter.

F. Pipes leading from cylinder E. to the spaces between the timbers. These pipes pass through that part of the ceiling commonly called limber boards, as shown in space marked L. and should not exceed two inches in diameter: all the pipes may be made of thick sheet copper; the cylinder E. should be made of the thickest sheet copper, securely stapled to the keelson, and cov-

ered with thick plank, capable of protecting it from the pressure of water tanks and ballast.

H. Timbers as shown, supposing the side of the ship to be sawed off from stem to stern, by the edge of the limber boards.

I. The spaces between the timbers, where the foul air is generated that has proved so destructive to all ships since it has become the practice to ceil them so closely.

K. The keel.

L. The ceiling plank, and that part commonly called limber boards, moveable for the purpose of cleaning the lower extremities of a ships bottom inside.

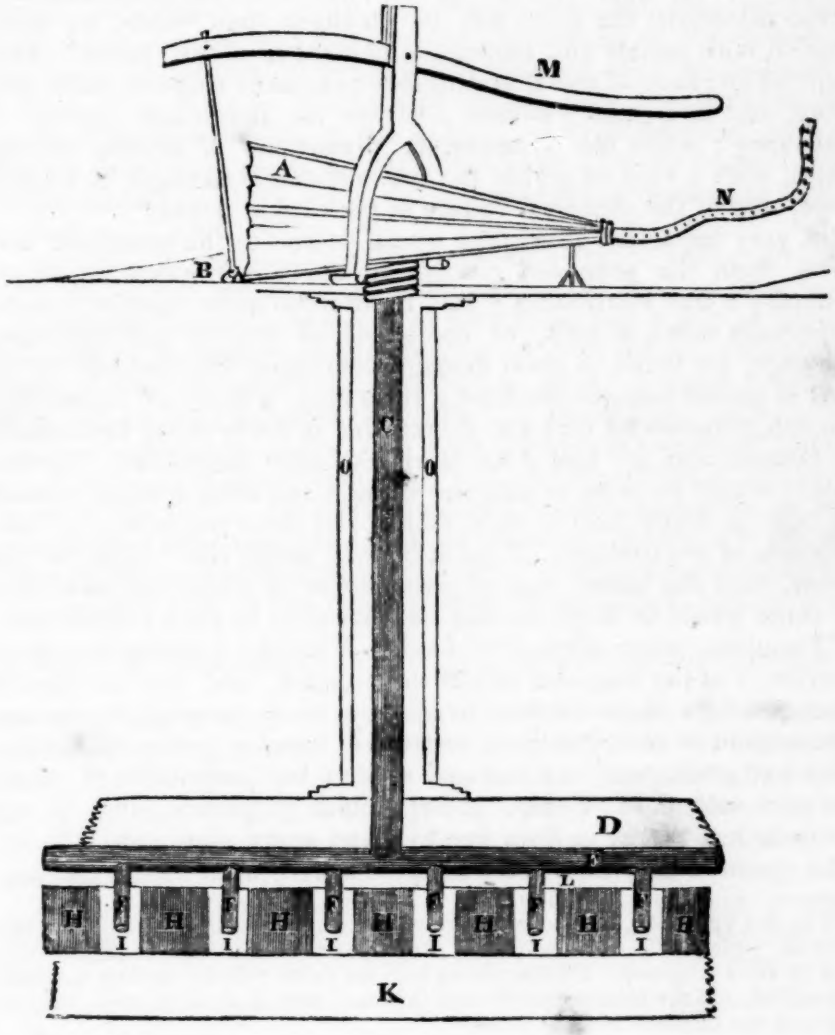
M. The lever by which the Bellows is worked, and which must be fixed on the under side.

N. Hose attached to the nozzle of the Bellows, and passed out of a port, to convey the foul air clear of the ship.

O. Half stanchions grooved, to receive and protect the communicating pipe.

AIR PUMP

For extracting Foul Air from Ships.



I will here mention, as a proof of the efficacious operation of the above described ventilator, that a small quantity of any odour, deposited in the hold of a ship, will, by the power of this machine, be brought in a few seconds, to the deck on which it is placed.

OF THE BUILDING OF SHIPS.

In the preceding pages I have intimated, that in order to the beneficial operation of the Air-Pump or Bellows, and to prevent the secretion of the destructive air, which the machine is intended to extract, ships should undergo a considerable change in their construction.

I have submitted my ideas on this subject to several of our most celebrated mechanics, all of whom concur with me in the opinion, that a change may be made in the manner of constructing our ships, without the least risk of impairing their strength; for, although there will be a much smaller quantity of materials employed than in those heretofore built, yet, from the combination of these materials, the ships will be stronger than when, as now, loaded with metals and timbers, which rot in a few years. This superabundance of metal and timber occasions ships to swim too deep, and in a great measure destroys the invaluable quality of buoyancy; while the unnecessary precaution of closely ceiling ships, with a view of giving to them additional strength, is, I again urge, one of the principal causes of their rapid decay.*

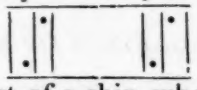
A very important advantage would accrue to the merchant service, from the proposed change in the construction of ships, whereby a free ventilation would be afforded to the *cargoes*, which, especially when in bulk, or composed of articles making close stowage, are liable to great damage from being over-heated. This evil is almost inseperable from a *tight* ship, which, as before observed, generates a foul air, destructive to every thing that comes in contact with it; and it has been distinctly ascertained, that less injury would be done to cargoes of grain and other articles, stowed in bulk, in leaky than in tight ships; the latter not being so susceptible of ventilation. A great benefit would also result to the *crews*, from the better state of preservation in which the *provisions* of ships would be kept, by this improvement in their ventilation.

Formerly, when ships were built in Virginia, (for the merchant service,) of the common oak of the country, and not so closely connected in their timbers or ceiling as at present, it was not uncommon to see them from sixteen to twenty years old before they had undergone any material repair; but lamentable to relate, we now seldom see a ship, either public or private, that is not more or less rotten in from five to seven years after she is built. The question may then reasonably be asked, what nation can sup-

* In the year 1805, Col. Lear informed me, that he visited the frigate *Crescent* in Algiers—she was then about seven years old, and built of the common oak of New-England. On examining her, he found that her ceiling had been taken out; and the Minister of Marine informed him, that to this cause they attributed the duration of their ships.

port a navy, if its ships are to be rebuilt in so short a time after their construction?

Again, if the quantity of timber used in the construction of ships, both public and private, is under any circumstances, necessary, how are we to account for the latter performing long voyages, through tempestuous oceans, loaded with heavy cargoes, without complaining either by straining or leaking; when on examination, they are found to be so rotten as scarcely to exhibit one entire sound plank or timber; and, but for the superior quality of the live-oak, of which our national ships are principally framed, they would be in the same situation? The fact above stated, of the competency of our private ships to sustain the strain of heavy cargoes, even in the decayed condition represented, certainly goes to prove, that more timber is employed in the construction of our public ships than is necessary for the purposes of strength alone; and regard to the valuable quality of buoyancy, should furnish a strong reason for not lumbering them with superfluous materials. It is an incontrovertible fact, that merchant ships have encountered the heaviest gales while in the condition above stated, without exhibiting the slightest sign of weakness. Public ships, when so loaded with timber, float too deep in the water, either for comfort or fast sailing. The practice too of ceiling the decks over head, for ornament sake, is also ruinous to the beams and deck plank itself, while it so much increases the weight in timber, of which I complain.

All national vessels should be built with copper bolts, wherever they can be introduced, to be secured by *screw* taps on their inner ends, and removed or replaced at pleasure when a ship is repaired; and by no means should the present practice of cutting out plank and breaking off bolts be allowed; being a great waste of time and often of valuable materials. If ships were built in the manner here recommended, the strakes of plank might be removed or replaced with convenience, without an additional hole being bored in the frame. It might probably become necessary, in this case, to use bolts one size larger in repairing, as driving out the bolts might somewhat enlarge the hole. I should recommend one bolt in each edge of the plank to pass through each timber composing the frame thus  and not to use tree-nails or spikes at all, in any part of a ship where they can be dispensed with. Thus constructed, ships can be completely ventilated, and when they require repairs, they may be taken asunder with perfect ease, and in a manner to expose every part of their frame to view, by which plan no defect can be concealed or rendered difficult to remove.

Again, ships should be built in regular frames, cogged or dowelled together, and strongly bolted, from the floors to the top timbers. These frames should be placed from eight to twelve inches apart, (according to the size of the ship;) the ceiling as far up

from the keelson, as one or two strakes above the floor heads, may be flush, and then chamfered pieces, (a term used by carpenters for horizontal pieces of plank) perforated with many small smooth holes, let in between the timbers—covering the openings between the ceiling and outside plank, to admit the fresh air, as fast as the foul is pumped out by ventilators; the ceiling should then be partial up to the strake below the clamps of the lower gun-deck; using only three strakes of ceiling, of from eight to twelve inches wide (according to the size of the ship) over each joining of the timbers. The ceiling should be of plank one third thicker than that commonly used, and the frame let into it fully that third, thereby forming a kind of jog and chock work, on the principle of a square, supported from the point of each angle thus which renders the whole frame more secure than a general ceiling in the manner now practised. On each gun deck a strake, or a small part of one, should be left out, and the openings furnished with shutters, hung by hinges, or metal slides, opposite each aperture between the frames for the purposes of ventilation: to be closed in time of action, or during violent weather. On this plan it is evident ships would be much lighter, contain less timber and other costly materials; would also be sufficiently strong, and show at the first glance that they must be more healthy, as there would be scarcely a place in them where foul air could be secreted.

OF STORE ROOMS, &c.

The whole system of bulk-heads and partitions for store rooms might also be changed for a more open and airy arrangement, all tending to remedy the evil complained of, by admitting a free and unobstructed current of air into every department of the ship, alike promotive of the health of the crews, the preservation of the ships, and of the valuable materials in charge of the store-keepers. Stanchions and shelves would answer all the purpose of dividing the different articles, and one *general store-keeper*, better qualified than those to whom such service has heretofore been assigned, would suffice to supervise the whole distribution of the stores.

OF THE MAGAZINES OF SHIPS.

The Magazine of every ship should be as distinct from the hull as convenience will permit. It should form a box, supported on all sides by stanchions, and made perfectly tight, so that in case of fire, it might be overflowed by water, introduced by a pipe passing through the sides of the ship into the box, without connexion with any other part of the ship's hold. An excellent idea has lately been suggested, for guarding against accidents, in conveying powder on board of ships, as well as against the awfully destructive effects of an explosion in the magazine. The plan is this: to have canisters of copper, with screw tops, made water tight, ca-

pable of containing from sixteen to twenty rounds of cartridges. Under such circumstances, should a fire occur on board, the Magazine might immediately be filled with water, without detriment to the powder; and the ship might burn to the water's edge and fill, before an explosion would be likely to take place. Another highly important advantage of this plan, is the increased effect given to the exertions of the crew, by removing all apprehension of her blowing up; the alarm from which, has on several occasions proved destructive to that discipline, which otherwise might have been effectual in saving the ship.

OF THE PUMPS OF SHIPS.

I cannot but look back with astonishment at the listlessness that has prevailed in the nautical world, for such a length of time, in allowing so great a quantity of water to remain in a ship, after the pumps have sucked. This water, commonly called bilge water, is also a principal cause of a ship's decay, and of the unhealthiness of the crews; notwithstanding which, it is yet the custom to allow, from six inches to two feet of this poisonous water to remain in a ship, under the idea that it would be dangerous to let the pumps have a closer connexion with the seams of the garboard strake, lest they should draw out the oakum from those seams so nearly connected with them. The best reason that could be assigned for not allowing the pumps to descend lower, or to the outer plank of the bottom, commonly called the skin, is that ships are now built much stronger than heretofore, and of course from the close connexion of the floor timbers, there is not room for the pumps to enter between them; consequently the depth of the floor timbers determines the quantity of bilge water, allowed to remain in a ship. This inconvenience might be removed by having one or more *small* pumps placed farther aft, and let so close down to the inner part of the outward skin, as to take this water up within an inch of the bottom. I will suppose that the close connexion of the floor timbers—or a better reason than the one assigned, namely, that when further removed from any obstruction, the water naturally flows more freely to their heels or entrance—has been the cause of the pumps not being let down nearer to the bottom of a ship. But this reason can have no manner of influence, nor be properly urged as an objection to allowing one or two small pumps to go down within one inch of the bottom, only to be used in drawing this fetid water entirely out of the ship, after those placed at a greater distance from the bottom have sucked, and thereby to extract the last drop of this poisonous cause of death and destruction.

SHIPS ON THE STOCKS, UNDER COVER.

One simple suggestion for their better preservation, may not be ill-timed.

The admission of the external atmosphere in its mildest stages, is, as before intimated, as advantageous to the preservation of timber,

as it is generally found to be to that of the human system. Timber of the most superior quality, and in fact every species and quality of wood, exposed to unrestrained currents of the atmosphere, will be rent and split to pieces by the alternate expansion and contraction thereby occasioned. The proofs of this are numerous and of daily recurrence. I would therefore recommend that all ships under cover, should be sheltered from the effects of changes in the atmosphere, by causing all the apertures in the ship houses to be as carefully closed as if occupied by families; and opened only when the air is pure and salubrious—for it is an undeniable truth, that timber exposed to the unrestrained currents of the atmosphere, and the vicissitudes of the weather, is rapidly rendered unfit for any useful purpose. Our household furniture affords conclusive evidence of this result; for however perishable its materials, it is seldom seen to be decayed or rent.

If the foul air in the first instance, and an unrestrained current in the second, are not respectively the causes of the rapid destruction of timber, to what cause is it ascribable, that every species of wood, even of the most inferior kind, is found in a good state of preservation when totally excluded from the influence of either of these destructive agents?

ADDITIONAL REMARKS.

OF THE CHOICE AND PREPARATION OF TIMBER.

After all that has been said on this subject, it may not be improper to premise, that a part of the sudden decay observed in ships, for the last thirty years, may have originated from causes, other than those already noticed.

First—No timber should be used, taken from trees after they have passed maturity. It would, therefore, require that all contracts made for timber intended for ship building, should subject the contractors to the control of an inspector, whose botanical knowledge should be such, as to enable him to decide whether the tree had reached the proper age, or had passed it; this is a matter of much importance, and if neglected, will produce those ruinous effects which might be avoided by the comparatively small amount of expense incurred, by the constant employment of a competent person, whose duty it should be to inspect, designate and mark the trees previous to their being cut down.

Secondly—The treatment of the timber after it is cut down, and previous to its being put into the ship, should occupy much of our attention. From the moment that the tree falls, the hands should never leave it until it is stripped of the bark, and raised at least two feet from the earth. It should then be removed to well ventilated houses as soon as possible, but not exposed to a thorough draft of the atmosphere, for that produces a new species of destruction, such as renting and cracking the timber in so great a degree, as nearly to disunite or separate it into small pieces.

Thirdly—The season. This part of the subject should also claim our attention, but it will readily be seen that there is more left for conjecture, on this head, and less certainty, than on either of the others.

I find that there are many intelligent men, who have employed much of their time in making experiments on timber cut at different periods of the year, but none of the results produced by those experiments, appear to have settled the question as to which deserves a preference. I have heard it asserted by a gentleman of respectability, that oak cut down in the month of June, when the leaves were shooting forth, possessed the quality of preserving iron; the sap being sweet at that time, and that the reverse would be the case, if cut in the autumn or winter.

Experiments made with judgment and accuracy, are much wanted, to enable those interested to decide on this question. It requires time, and I suppose that is the only reason why it has not yet been sufficiently tested to put the matter at rest. But let it be cut at whatever season it may, or treated in the best possible manner known, I will venture to predict, that if it is put into a ship, built as closely as is now the practice, that it will share the same fate, which has been its common lot for the last thirty years. Water seasoning is highly approved of by many practical men, but that method, also, appears to want some well attested experimental evidence to entitle it to general credit.

It should be recollected that within the last thirty years, great havoc has been made in the forests of this country;—timber, consequently, has become scarce, and dear. Hence, we may infer, as the natural result, that inferior qualities are forced into the markets, and of course, the inspection should be commensurate with the exigencies caused by those circumstances.

ON THE SEASON FOR CUTTING SHIP-TIMBER, AND THE MANNER OF PRESERVING IT.

Nothing is here attempted to be established on speculation; nor any thing advanced, which cannot be supported by facts and the result of old experience.

It is true, that it has long been the practice to cut ship-timber in the winter;—and it is also true, that ships which have been built of winter-felled timber have been known to last twenty years in a tolerable sound state,—that is, they have not received any material repairs during that period. But where these proofs of durability exist, there are equal evidences that the mode of building had great influence in the preservation of the timber.

In those days of great durability, ventilation was much more extensive than of late, or the last thirty years. Since that period a greater quantity of timber has been crowded into frames, and some of them now are built in almost solid masses, excluding the most useful considerations on the score of durability, the limber holes in the floor timbers, which were intended to operate in vessels as

common sewers in cities, by conducting the water, and along with it the filth, to the pump-well. These great conveniences being dispensed with, and the frames solid below, the water that find its way into the ship, will of course come in direct contact with the ballast and other materials laying on the ceiling, and must rise to a considerable height before it can get to the pump-well; the effect of thus retaining this filthy water a long time in the hold, must be destructive to the ship, and also to the health of the crew.

I am persuaded that the summer months, and not those of the winter, have proved to be the best season for cutting all descriptions of timber, as well for ships as for other purposes; as the greatest length of time, that wood of various kinds has been known to last, has been that cut during the summer months;—and it is asserted on good authority, that in all those species which are said to contain acid in the autumn, the same substance is sweet in the summer months, and if cut at that time will last longer, and preserve iron better than if cut at any other season of the year.

No treatment of timber, that it has ever been subjected to, has proved so destructive as water seasoning.

After any kind of timber used in ship-building, in this country, has been put green for one or two years into the water, either fresh or salt, and afterwards worked up in the frame or plank of ships, it begins to decay rapidly from the moment of its exposure to the air, and in a few months after it is hauled out of the water, the change is so perceptible that the smallest attention will convince an observer, that all the natural resin, gum, or juices of the wood have been decomposed by the water, and as that drains off or evaporates, the wood assumes a rough, spongy appearance, and will be found to be entirely divested of its natural smell and toughness, breaking with a slight effort, and reduced to dust by moderate friction.

Ships built of this water-seasoned timber, decay in such a degree as to require entire repairs in five years. The staves in our coopers' yards afford the strongest proof of the assertions which I have made, in support of my opinion, of the evil consequences resulting from water seasoning. Staves are never put into the water.

The greatest portion of the staves, after being exposed to the weather six or eight years, are found to be perfectly sound when the tool is applied, presenting a smooth surface with a compact grain; while timber which has been immersed in water, or entombed in mud, puts on an entire different appearance;—besides the ruin which water seasoning occasions, the expense of putting the timber in, attending it while there, and taking it out, is enormous.

There can be no doubt of the origin of this mode of treating timber. It commenced with those who had occasionally too much for immediate use, and to save it from the effects of sun and rains, which occasion rents and splits, soon rendering it unsightly, it has been put into water, and if fresh, it has been drawn out, apparently good, and passed off as worthy of confidence; but if the water is

salt, it must be turned frequently, to prevent the worms from destroying it, which labor is attended with great expense.

The mode that I am induced to recommend, from the experience of others and my own, is to cut the timber down in the early part of the summer, and reduce it nearly to its intended size and form; then to convey it speedily to some well ventilated building for shelter, and there kept until required for use. After two years of this treatment of timber, it will be found, on breaking up old ships, that their bottom plank is not so brittle as that which has been thrown green into the water, and allowed to remain for a length of time. All timber is injured more or less by laying long in the water, but that which suffers most is pine timber, and the proof is evident in wharf logs; they are almost always made of trees directly from the woods, and in a few months after they are taken up from the situations which they have occupied for years, they can be kicked to pieces with the foot, and are in a great measure as bibulous as sponge. For the last seven years I have endeavored to direct the attention of Architects of my acquaintance to this subject, and can say with a great degree of confidence that there are but few, with whom I have conferred, who have not entirely adopted my opinion in this important branch of national expense.

Several ships have come under my observation, that have been built and repaired with the best timber that our country produces, of white oak and pine, and from this mode of water seasoning, as I believe, have been found quite rotten in a few years.

There is one remarkable fact in the character of the pine, and it is this: if it is cut down and suffered to lay on the ground one night during the summer months, it puts on the appearance of sponge measureably saturated with water, and is found to be filled with small worm holes; and no method, that has yet been employed, appears to have had any effect in remedying this strange evil, and it is as well known as any common occurrence can be, that this timber, thus treated, rots immediately, and I think it probable that other species of timber are injured by this treatment. The pine if raised, immediately after it is felled, a few feet from the earth, and hewn so as to divest it of its bark, becomes light and dry; and from a number of specimens which I have seen, I am induced to adopt the opinion, that it will last in a well ventilated ship or house for twenty years without material repairs.

PROVIDENT SOCIETY.

The project of a Military and Naval Provident Society—a project to constrain all officers, willing or unwilling—bachelors and Benedicks—to an involuntary charitableness for the good of the latter—having assumed so imposing an aspest by the patronage of the Secretary of War, and the introduction of a bill for its accomplishment into Congress; and an impression having gone abroad that the thing meets with general favor in the Army,—it is proper that the officers who have hitherto kept silent only from a belief that the projects put forward were too crude, unfair and impracticable to gain favor and do hurt, should make themselves heard on the other side. As one of these, I claim to enter my protest against this unjust scheme, equally impolitic if it were practicable, and impracticable if politic.

Any number of gentlemen have a perfect right, certainly, to enter into any such association, as to them may seem good. But let us have no charity "upon compulsion"—"The quality of mercy is not strained"—neither is that of charity. Such benevolence is not "twice blessed;" it may chance to cause some cursing on one side.

The project I have characterized as impolitic if it were practicable, and impracticable if politic. As we go along, I shall shew you how and why it is so.

First, of its policy:—

The number of married officers now in service constitutes not quite one half of the whole number; and much better would it be for us, and for the service, I humbly opine, if the proportion were diminished; the inconvenience will be extreme, if it be much increased. Already, whenever several companies are stationed together, there is a scarcity of quarters; a crowding, and squabbling, and grumbling. Bachelors are constrained by gallantry, or good nature, to surrender a portion of their equal rights to the better halves of their Benedick brothers. Already we bachelors are generally unable to muster a sufficient number of our respectable fraternity to form a good mess. But if our thinned ranks are thus to be broken in upon by this species of bribery and corruption—if those, who have thus far manfully stood by us, in spite of all Cupid's shafts, are thus to be seduced from our ranks by this premium on propagation—we may expect ere long to find a couple of lieutenants with their two wives, and God knows how many of their progeny, sons and daughters, the tenants of a single barrack room. A glorious messing there will be then.

There is no need of any such premium. Men are but too prone that way. The thing needs a curb, not a spur. And if the curb of prudence and poverty is so ineffectual to keep men single, as the advocates of this project pretend,—so that an unconstitutional poor-rate is requisite for the relief of the unfortunates,

who have been made "the happiest of mortals,"—what state of things is to be expected, when all prudential considerations shall have been removed to the other side of the equation, and the stimulant of a bounty, for doing so comfortable a thing as to take a blooming bride to our arms, applied?

I hold it not only impolitic and unjust but positively immoral, by bounties and privileges on one side, and taxes and privations on the other, to encourage young soldiers, "whose business is to die," to become the authors of life, for the support of which the preservation of their own lives will be necessary; and to make over to others an interest in that, which belongs not to themselves;—to hold out to them inducements to form alliances, which, by fixing all strong affections determinately and immovably on other objects, may render them less ardent in the chase of glory—alliances, which, by imposing new and strong (some might think paramount) duties and obligations, may cause even good and true men to consult sometimes temporary expedients, rather than the claims of Honor, high Honor, the life of the soldier's spirit.

Let me not be misapprehended. Very far be from me imputation upon, or distrust of, those of my brother officers, who, impelled by a feeling which, especially when the feelings are fresh and the young blood hot, the strongest are not always strong enough to resist,—which often makes the most prudent contemn prudence,—have, like the brave soldier and would-be-hachelor Benedick before them, become married men. So far as my acquaintance goes, I know them to be very honorable men, whom no consideration, however near and dear, could make one moment waver from the path of honor and duty, through whatsoever and wheresoever that path might lead.

I speak only of general principles; such as are calculated to influence the conduct and mould the characters of ordinary men. On these principles, unless I have read human nature wrong, the obvious and necessary consequences of the proposed measure must tend to diminish professional pride, to make life more dear and danger more formidable; to fix upon other objects affections which should belong to the country and the profession; to divert into other channels, energies which should be devoted to Honor and to Glory.

Severe must be the trial, dreadful the alternative, when Duty, stern Duty, points, and Honor beckons in one direction, whilst to an opposite course the cries of the dearest objects of human affection, around whom every fibre of the heart is interwoven, imploringly call. I say not, that honorable men would therefore hesitate; but I do say, that it is neither right nor politic for the legislature to hold out inducements to tempt, and impose hardships to force, young soldiers into any condition, however holy and respectable, which might in after time make necessary a choice in such an alternative. The soldier's whole heart should be his country's.

The Popes of Rome gained by prudence and policy alone, more than arms ever accomplished—the almost undisputed empire of

Europe. Could they have effected this by the aid of married priests? The lesson is a sound one; and the cause, to which the soldier is pledged, is scarcely less holy than the cause of religion.

In the above remarks, I have anticipated a state of war; it is in anticipation of such a state, that officers are instructed, and soldiers drilled, and armies kept on foot. A word, as to the influence of universal matrimony in time of peace—a very unfortunate time for us. When every Officer shall have his helpmate, and the roof of every barrack shall shelter as many families as it contains rooms, it may happen that there will be less peace in quarters than abroad; and less than good fellowship and good discipline require. None admire, love and adore, more than I do, the lovelier sex: but, verily, it is a truth, that if too many of them (disunited by blood and affection) are cooped into too small a space, they must fall out. The Spaniards are right, as they usually are in their proverbs: "No house is too small for one family, or big enough for two."

But I have, over and above all the rest, a special personal objection to this thing. I am still one of the bachelors—the gods be praised; the gods willing, I propose to remain so. But God knows what any of us are to come to. Now, if I should ever happen to get into a scrape, and be tempted to exchange independence for matrimonial felicity, I wish it not to be in the power of any man, or set of men, to grumble, or to sneer, at my assuming the obligation of endeavoring to raise up beggars to their charge. Let the fruits of my own follies, past and future, be my own food. I insist upon it, that they be not shuffled into another person's plate.

But again—the proposed law is unconstitutional. I can consider the measure in no other light than as a direct tax for certain charitable purposes. The salary of any Officer of the Government is as much his own, so soon as it becomes due, as wages in any other case are the property of the person who has earned them.

Whatever sum of money the law annexes as a compensation to the duties of any office, is, when it becomes due, as much the property of the officer, as his bank stock or other funds. If taxed, therefore, it must be in a constitutional way, and for constitutional purposes. Both the object of the proposed tax and the manner of levying it, seem to me clearly unconstitutional. The constitution provides, that all taxes shall be uniform. This project, and the law before Congress in pursuance of it, propose a direct tax upon a certain class of officers, from which all other public officers, and all other citizens, are wholly exempt. Will it be pretended that there is uniformity in this?

The constitution specifies the purposes for which taxes, &c. may be levied. The support of widows and orphans is not among these, and cannot be included under any of them, unless such widows and orphans as are contemplated by this law, be reckoned a constituent part of the armies, which Congress is authorized to raise and support. The efficiency of such a corps may

well be doubted. If, however, such a corps is to be added to our army, and form a part of the regular forces, kept on foot in preparation for war, let them at least be organized, drilled and disciplined.

I am tired of my pen, but must say a word, before I close, of the practicability of the project. And first, I will remark, that all the officers who have embraced it, seem to have done so, as men take wives, "for better or for worse," without much enquiry which of the two it is likely to turn out. They have either proposed no definite plan at all, or plans so outrageous that we can scarcely believe the gentlemen in earnest,—cannot certainly believe that they have maturely considered them. Figures of speech they give us bountifully: figures of arithmetic would have been more to the purpose. They seem to have acted under some sudden impulse of feeling, which hurried them to pledge themselves to support some uncertain plan for some certain object; or for one of several objects; or all of them, as the case might be. They might, hereafter, be not a little astonished at finding how insupportable was the dear burthen, which at first sight they so eagerly took to their bosoms—or upon their backs.

Let us examine some of the proceedings in detail. There is one proposition which, from its being found in all of them, seems to be considered essential—a Congress of officers, to meet at Washington. Now, if officers at a post may assemble together and send a part of their number away to a charitable Congress at Washington, they may send them for the same or similar purposes to Liberia, or the Sandwich Islands—or the Devil. I know no military law or usage, which converts a Military post into so democratic an establishment. The Commanding General may, indeed, at his discretion, grant indulgences in the shape of leaves of absence to whomsoever he may think entitled to them. But was such a thing ever heard of, in any military organization more regular than the most irregular militia, as the officers designating to the Commanding General, by a plurality of voices, who, on *their* account ought to be indulged? Will the Commander-in-Chief say to the officers, —"assemble yourselves together at your several posts, and instruct me to which of you I must grant leave of absence for the good of the service." If he does, it will be a queer speech for a General; I do not think he will use it.

The officers at Hancock Barracks are "truly surprised" at the apathy on the subject generally manifested, and impute it to the want of a "little consideration." Would it not be a fair retort to suggest, (what seems to me the truth) that it is because these gentlemen have bestowed upon this important subject but "*little consideration*," that they have so hastily adopted so crude a project with so much "laudable zeal." They refer to a similar project, which was started at Washington a few years since, and "which proved abortive: but what were the reasons of the failure," they think it "not necessary now to enquire." It happens that the cause of failure was nothing less than the utter impossibility, in the estimation of the experienced and able officers who signed

the report on the subject, republished in this Magazine, (see November number) of devising any practicable plan for the accomplishment of the very object contemplated by these gentlemen. If these gentlemen of Hancock Barracks think such a cause so unworthy of consideration, I would like to know what facts and reasons they would think it worth while to inquire into. They will not need a fulcrum, as Archimides did, to remove the earth from its orbit. They declare that it is manifest—that it is "generally admitted, that a Provident Society *of some sort* is urgently demanded for the well-being of us all." This very improvident project, thus adopted and embraced without examination, goes farther to shew this by its very proposition, than all the arguments adduced by its advocates. But let these gentlemen, and such as think with them, form such a society for themselves, and excuse me from being a member. My purse is no whit too heavy now; I cannot see how my well-being is to be promoted by a tax upon it. When I have any thing to give, let me give in my own way and at my own discretion. They talk of "increased chances of promotion." Do men die sooner who have wives? They speak of "advantages too great to be denied;" I cannot see them—they have not shewn them. But they say not one word of the *quo modo*, or of practicability. They gave all such considerations the dead cut at setting out; they plunge *in medias res*—but into what? They have not told us—they seem not precisely to know. To plunge *in medias res* may be a good poetic, but is a bad practical or argumentative rule.

The officers at Fort Columbus express "approbation of the proposed measure;" but do not tell *what* proposed measure, or the grounds of their approbation.

The officers at Fort Niagara resolve, that it is highly desirable that a society should be formed and a fund raised for three purposes; they enter into no calculation of cost, but pledge themselves to support *any project*. The Secretary of War, taking it for granted, I presume, that men of scientific educations had made some sort of calculation of the adequacy of their means to the ends proposed, patronizes in his report, these same three highly desirable purposes.

Now, I like this: it is doing things in a dashing way. But why did not these gentlemen fill up so grand a design? Why did they not include among their highly desirable purposes, the erection and support of a Military Hospital and Lunatic Asylum—a school for officers' children—and a lying-in hospital for officers' wives? The last mentioned establishment is likely to become indispensable, should the bill now in Congress in furtherance of these gentlemen's purposes, become a law. The necessity of the first will be made manifest by a few more such projects being so warmly embraced by so respectable a number of officers,—and my second is decidedly the most important of the whole six.

But if these gentlemen of Fort Niagara, or any of them, will go to the Black-board (or, if they have taken a distaste for black-

boards, will borrrow Jack Downing's slate) and calculate by the simple rules of arithmetic the amount of tax upon their slender salaries, required for the accomplishment of their three highly desirable objects, (leaving mine, more important though they be, out of the question) they will find themselves much astonished at the enormous weight of the burthen they have pledged themselves to support, and perhaps beg to be excused from their too hastily given pledge.

Similar criticisms are applicable to all the proceedings, in approbation of the measure, which have fallen under my eye. At one post, however, the project has been examined coolly on its merits, and good reasons adduced for the conclusions arrived at. The officers at West Point, being in the habit, from their daily occupations, of scanning things narrowly, before assenting to them, submitted the project to the ordeal of analysis. The result is before the Army, in the January number of the Magazine. Let who can refute their reasoning, or gainsay their conclusions. But the case is even stronger than this argument makes it: the calculations are based upon the existing state of things; but considering the manifest tendency of the proposed measure to bribe young men to marriage, it would be but fair to base our calculations on the supposition that all officers who die, will leave families; or at least allowing for a few obstinate old bachelors here and there, to double the number of married men. Substitute then 16 for 8, as the annual increase of pensioners, and 3,600 instead of 1,800 dollars, as the annual increment of pensions, in table A, and if the result does not cool something of the "laudable zeal" of certain gentlemen, that zeal must be of a most obstinately feverish character.

When I sat down, I had no thought of writing one third of what I have written, but the matter has continued to grow under my pen, and what seems very short in the process of thinking, looks confoundedly long, when written down. My pen is now quite worn out—so I fear is the patience of the reader. For the present, therefore, though I have more matter on the subject in store, let this little taste suffice.

But, in conclusion, I must disclaim any unkind feeling or disrespect towards those of my brother officers, who, with the best purposes and greatest disinterestedness, have hastily engaged as advocates of this bad measure. It is my way, to laugh when I can, and if I have laughed a little at their proceedings and projects, it is no more, I am sure, than they will themselves do, when they shall have scanned them more minutely.

CŒLEBS,

(BUT NOT "IN SEARCH OF A WIFE.")

STEAM NAVIGATION.

"Fiat justitia, ruat cælum."

"It appears from a late publication, a very very valuable one by the by, "Navarette's collection of Spanish voyages and discoveries," that the first known experiment of propelling a vessel by *steam* was made at Barcelona, more than *eighty five years* before the idea of procuring motion by it was first promulgated by Brancas in Italy; more than a *century* before this agent was applied to any useful purpose, by the Marquis of Worcester in England; and nearly *three centuries* before our own Fulton, adapting and combining the inventions of a number of contemporary mechanics, successfully solved the same wonderful problem. Curious as this fact may appear, it is completely established by various documents lately found in the archives of Samancas; and is so circumstantially stated, as to be incontrovertible. From these it appears, that in 1543 Blasco de Garay, a sea officer, offered to exhibit before the Emperor Charles V. a machine, by means of which a vessel should be made to move, without the assistance of sails or oars. Though the proposal seemed extravagant, yet the man appeared to be so confident of success, that the Emperor ordered a commission to witness and report upon the experiment. It consisted of Don Enrique de Toledo, Don Pedro Cardona, the Treasurer Ravago, the Vice Chancellor Gralla, and many experienced seamen. The experiment was made on the 17th of June, 1543, on board a vessel called "Trinidad," of two hundred barrels burthen, which had lately arrived, laden with wheat, from Colibre. At a given moment this vessel was seen to move forward and turn about at pleasure, without sail, or oar, or human agency, and without any visible mechanism, *except a huge boiler of hot water, and a complicated combination of wheels and paddles.* The harbor of Barcelona resounded with plaudits, and the commissioners, who shared in the general enthusiasm, all made favorable reports to the Emperor, except the Treasurer Ravago. This man, from some unknown cause, was prejudiced against the inventor and his machine. He took great pains to undervalue it, stating, amongst other objections, that it could be of little use, since it only propelled a vessel *two leagues in three hours;* that it must be vastly expensive, as it was very complicated; and that there was great danger of the boiler's bursting frequently. The experiment over, Garay collected his machinery, and having deposited the wooden part in the Royal Arsenal, carried the remainder to his own house."

In my reading I have somewhere met with the above, which you may deem worthy of a place in your Magazine. The details may be relied on, as I made a note of them at the time, in the

JOURNAL OF A REEFER.

THE SHOES OF SUCCESSION,

OR

MILITARY BOOTS.

It is a fact to readers known,
That when an heir ascends the throne,
He has to thrust his heels and toes
Within his predecessor's shoes;
And, as the crown goes on the brow,
The shoes go on the feet below.
With us, both crown and throne of state,
Of course, have long been out of date.
Our President sits in a chair,
And any kind of hat may wear;
Puts on what garments he may choose,
From head to foot—except the shoes.
A pair of these, like royal crown,
Is carefully transmitted down,
And, at Inauguration, shows
The man to whom the nation bows.

Our first illustrious President
Could not receive one by descent.
First in the Presidential chair,
He had to get the standard pair.
His martial limbs through many a year,
Had worn alone the soldier's gear.
The camp (his home) requir'd a boot,
Whose rigid heel the spur would suit;
And some believ'd that he would claim,
As President, to wear the same.
Mayhap, with his great services,
He could have done as he should please.
But well he knew that civil life
Throws off the garb of battle-strife;
That when he laid the sword aside,
To ride no more in plumed pride,
The boot and spur should also go, [shoe.
And yield their place to low-vamp'd
His foot was of that noble mould,
Which statue-heroes have of old;
And boot and shoe his step became:
In war or peace, 'twas all the same.

John, his successor, well might doubt,
When he stepp'd in, as George stepp'd
out, [loose.
Whether the shoes would not prove
But fitness comes, he thought, by use.
His patriotic head was strong;
But something in his gait was wrong.
The shoes, at last, all run awry,
'Twas thought his instep was too high.
He kick'd them off, 'tis said, in spite,
The 3d of March, at dead of night,
And left them to the servant's broom,
That swept, next morn, the vacant room.

The foot of Thomas had a tread,
That gave it an uncommon spread,
Like that which may have mark'd the
trace
Of Athen's free and sandall'd race;
And would, perhaps, have felt restrain'd,
Had the "succession shoes" remain'd;
He did not quite approve their shape,
Which something foreign seem'd to ape;
And those he chose as substitutes,
Were, strictly, neither shoes nor boots.
Cov'ring the instep's arch of pride,
And round the ankles closely tied,
They stopp'd just where the boots begin,
And left expos'd the calf and shin.

The James' M. these plain bootees,
Wore through their terms, with perfect
ease;
Though he, who had them in a war,
Left here and there a rip and scar;
And he, who drew their lacings tight,
To show his readiness for fight,
When Europe dar'd to say that Spain
The lofty Andes should enchain,
May, too, have left some marks behind,
That showed his Trenton stamp of mind.

When Congress said that second John
Should be allowed to put them on,
The people seem'd to disapprove,
Although they fitted like a glove.
They said it was not *he* they meant
Should be consider'd President;
And when again they came to choose,
John, like his Father, lost the shoes;
But bore his loss with easy grace,
Content to take a lower place,
And, by his changeful lot, to show
Rotation's game of high and low.

Andrew, like him who led the van,
Had been a military man.
A boot his sinewy leg became;
It was in boots he won his fame.
Twas also said he could not bear
His predecessor's shoes to wear.
They had a *Panama-ic* look—
A slip-shod air he could not brook.

The people did not seem to care;
So Andrew, booted, took the chair.
And when again they rais'd their voice,

The booted Andrew was their choice.

His boots were, therefore, deem'd the pair,
That future Presidents must wear;
And all whose thoughts were soaring high,
Bootward were wont to cast an eye.
Andrew these prying looks observ'd,
And carefully the boots preserv'd,
Lest Henry C. or C. C. John
Should undertake to put them on;
Although, 'twas thought, some slyboots round
The fit occasion often found
To test their fit, and seem'd to know
Their ins and outs from heel to toe.

When Congress is about to close,
The President, by custom, goes
And stays within the Capitol,
To be within convenient call, [waste
And sign those bills, which months of
Leave to be done in hours of haste.
It happen'd once that the debate
Continu'd till an hour quite late,
And Andrew, nodding in his seat,
Drew off his boots to warm his feet.
His nose ere long began to sound,
And bruit his nap to all around,
When many a member, passing by,
Look'd in the room with curious eye.
The vacant boots, in rigid mood,
Like sentries by their master stood,
Reflecting from their polish bright
The lamp's and fire's unsteady light.
Each one whose hopes, however small,
The candidate of village Hall—
Of County—State—or wider sphere—
Cast on the boots an amorous leer,
And, giving at his feet a glance,
Resolv'd at once to try his chance.

No one, awhile, would venture in,
That Harry might the test begin;
But Harry said his corns would shoot
If he put on a martial boot,
And that he never would consent
To be a booted President.
The constitution wasn't express
About the Presidential dress,
But by constructive rule, he said,
He thought the calf should be display'd;
Unless—and *now* it might be so—
There chanc'd to be no calf to show.
Ve toes from *booted* toes arise,—
That usurpation in disguise.
The despot says that he came forth,
All spurr'd and booted from his birth,
Commission'd thus to ride, of course,
The rest of men just like a horse.
Let such a rider mount *his* back:
He'd find his horse could turn up Jack.

John C. C. next, 'twas thought, would try:
But "no" was in his brilliant eye.
His feet, he said, with cotton socks,
Would feel degraded in such stocks.
Besides, "*tu Brute*" like, of late,
Those boots had kick'd their "native state."
They had a "Proclamation" cast;
A "Force Bill" must have shap'd their last.
Charles sent his boots to rule the Swedes.
If boots rule here, the South secedes.

Daniel was now seen passing by,
And some one asked—if *he* would try?
But Daniel smil'd, and seem'd to say
His understanding did not lay
Within his feet:—he'd recommend
A trial of the other end.

Next came Judge John, in ermine drest,
But with a *mail* upon his breast.
He oft would throw his robes aside,
To show how he was fortified.
A letter'd man, and high in Court,
He had the promise of support.
Ohio had resolv'd his foot
Would fit the Presidential boot.
But just as he advanc'd to try,
Tecumseh Dick brush'd boldly by,
And said *his* foot of all the west,
Would fit the martial boot the best;—
(Provided—unfledg'd Michigan
Would still keep back her gifted man.)
He oft had heard the workies swear
His foot would fit them to a hair.
These workies surely know their trade;
Perhaps this very pair they made.
Kentucky (bless her!) knew full well,
That when a certain warrior fell,
(He'd leave the song and prints to show
Whose pistol laid that warrior low,)
He wore a pair resembling these,
As much as duplicates of pease.
Or, should his foot be found too short,
He had the "Sunday mail report,"
Which, manag'd well, he had no doubt,
Would eke defective matters out.

But just as Dick approach'd the door,
A Georgian Trooper tramp'd before,
And cried, "'*your* Government' is mine,
As soon as Andrew shall resign.
He who shall dare my right dispute,
Will hang like 'Tassels' to a boot.
'Tis known we Georgians have our way,
Or else the devil is to pay."

Tecumseh's spirit, as at Thames,
Burst from his eye and cheek in flames;
And, Hunter like, at once he felt
For knife or hatchet at his belt.

But belt and gear, by evil luck,
Had all been left in old Kentuck.

An officer was by, whose plume
Swept the high ceiling of the room;
Though little chance there seem'd for him,
With such a maypole length of limb.
But when the Georgian's gauntlet fell,
Niagara's spirit 'gan to swell; [vein,
Through the dense crowd, in battle-
He made a sort of "Lundy's Lane."
"A *Light* Troop you shall be," he said,
And twirl'd the Georgian o'er his head,
Who, flying through the vaulted air,
Stuck in a Candelabra there.

At the same moment one appear'd,
Who, all unseen, the whole had heard;
Who had, perhaps, vice-vigils kept,
While Presidential eyelids slept,—
And—presto! with a graceful bound,
All standing in the boots was found.
Andrew, at Candelabra's crash,
Rose from his slumbers like a flash,
And with his hickory, half asleep,
Was fain to make a "Horse shoe" sweep,
But check'd midway his wrathful stroke,
When from the boots Vice Martin spoke,
And told him why he chanc'd to be
The President pro tempore.
Andrew relax'd his lifted arm,
Well pleased that he had done no harm;
But said if either C. C. John
Or Henry C. had put them on,
His hickory stick, like guillotine,
Had swept their shoulders pretty clean.

"As they may still be prowling by,"
He said, "and boot-ward have an eye,
You'd best, friend Van, possession keep,
While I renew my broken sleep.
Or, if the Houses have adjourn'd,
And all the bills have been return'd;
If we have nothing more to do—
To sign or veto—let us go."

HAMMOCK CLOTHS.

A preparation for rendering canvass perfectly water proof, for hammock cloths, boat covers, tarpaulins, (or coverings for hatches) and a variety of other purposes, has always been a desideratum in the navy.

There are several in use, but none answer the purpose perfectly, as they wash off very soon, and oil being an ingredient of all of them, the canvass in cold weather becomes very stiff, cracks, and soon wears out. It is well known, that a method has been recently discovered, of preparing cloth with gum Caoutchouc, (India rubber,) by which it becomes perfectly water proof, and is rendered *very durable;* no oil is used in the process, but the cloth is very lightly coated with the gum in its purity, and is as flexible in the *coldest* as the *warmest* weather. The seams are not sewed, but cemented, and so firmly, that they never separate. I have a travelling bag made of this material; which I hung up for three days filled with water, in which time it was not even damp on the outside.

Cloth of every kind, from the heaviest canvass to the finest linen, can be thus prepared, and I am told, at small expense. Every officer of the navy is, of course, duly sensible of the importance of protecting hammocks perfectly from wet or damp, and every one knows, that on board small vessels, particularly, this protection is now very imperfect. I am sure, therefore, that they will generally agree with me, that for hammock cloths *at least*, canvass prepared with gum Caoutchouc, may be advantageously used.

OFFICERS' CERTIFICATES.

Mr. Editor :—Allow me to call your attention, and that of the numerous readers of your valuable Magazine, to a subject, of, as it seems to me, very great importance to the moral character of the Army. I allude to the multitude of certificates which the officers are required to make.

It has always been a maxim, among the honorable of every age and every country, that, of all sacred things the *word* of a gentleman should be the most sacred; that his pledged honor should not be violated for hope or fear—

> Summum crede nefas animam præferre pudori
> Et propter vitam vivendi perdere causas,

is but a beautiful exhibition of this universally received sentiment. Will it be believed then, that there is not perhaps *one* officer of the Army—that profession whose members have always been supposed to be, on the point of honor at least, "the very mould of form"—who does not in the course of the year sign more than one statement, and pledge himself to its truth "upon the word and honor of a gentleman"—that he knows, at the very time of signing it, to be absolutely false!

Let me not be mistaken: I do not intend to impute this as a fault to the members of a profession, to belong to which I esteem the highest honor. It is the fault of *system*—of system that has, since laws were first established, *created* crimes, for no other purpose, it would seem, but to punish them. But lest you should think that I confine myself too much to generals, let me, Mr. Editor, give you an example;—it shall be the certificate that every officer in the Army places at the foot of his pay-accounts, once perhaps in every two months—it is as follows:

"I hereby certify, that the foregoing account is accurate, and just: that I "have not received pay, nor drawn rations, forage or clothing in kind, or re- "ceived money in lieu of any part thereof for any part of the time herein char- "ged: *that I actually employed and kept in service the horse and private ser- "vant, for the whole of the time charged . . . . that the annexed is an accu- "rate description of my servant. . . . . .*" To this must be annexed a description of the servant, giving his *name, complexion, height,* in *feet and inches,* and the color of his *eyes* and his *hair.*

There are many other certificates as conscience-catching as this;—but I will confine my remarks to this; because they will not be applicable to individuals, since the parts I have marked as objectionable are prescribed by law.

The provisions above italicized are objectionable, because they place the interest and duty of the officer in direct and irreconcilable opposition. It can surely be a subject of no importance, not the slightest, to the government, whether or not the officer keeps the horse or servant for which he is allowed pay; while to subtract the allowances for these from the pay, is to reduce the salary

much below what the law contemplates, and, in many cases, below what is necessary for the actual support of the officer. On the other hand, the horses could not actually be kept, in many parts of the country, but at an expense considerably above the allowance.

What then, it may be enquired, is the practical effect of *requiring* such certificates? Why, that they are continually violated, either directly or indirectly. Many charge for the allowed number of horses, without pretending to keep any; others go to a livery-stable and make an agreement, to have a certain number of horses *said* to be kept for them; they never perhaps use them at all, and of course pay nothing for them; but the *words* of the law are complied with. Others again——but let us not lay open those by-paths that these useless regulations, and the paltry pay of our officers, compel gentlemen to frequent.

The case in respect to servants is parallel:—officers are continually ordered from one part of the country to another when it would be impossible for them to carry their servants, and yet, on penalty of losing a very large proportion of their pay, they are compelled to certify the name, height, complexion, &c. of the *particular* waiter that they have employed. My remarks have been extended, Mr. Editor, farther than I anticipated; though I trust you will not think that I have claimed too much space for the importance of the subject. I cannot, however, close my paper without earnestly recommending to the consideration of those, who may do me the honor to read these paragraphs, the following quotation from Dr. Paley's Moral Philosophy; he is speaking of oaths: "This obscure and eliptical form, *together with the levity and frequency with which it is administered*, has brought about a general inadvertency to the obligation of oaths, which, both in a religious and political view, is much to be lamented; and it merits public consideration, whether the requiring of oaths on so many frivolous occasions . . . . has any other effect than to make them cheap in the minds of the people. . . . Let the law continue its own sanctions, if they be thought requisite, but let it spare the solemnity of an oath."

Allow me, though with infinitely less authority, to take up the exhortatory style, and say: let our legislators repeal all these traps in which to catch the conscience of the officer; let him no longer be taught to make a distinction between his pledge to the truth of an account and to the truth of any thing else. Let not his statements be liable to the closest scrutiny on one part, and to be passed over as unimportant in another. Let him be rigidly punished for every intentionally false account. Do away with this requiring of elaborate certificates on every trivial occasion, and on every petty point; and the *word of a soldier* shall become in *fact*, as it is in *name*, an inviolable pledge.

Most respectfully, your obedient servant,

P. S. C.

LAW OF THE UNITED STATES.

AN ACT making appropriations for the naval service, for the year one thousand eight hundred and thirty-four.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be appropriated for the naval service for the year one thousand eight hundred and thirty four, in addition to the unexpended balances of former appropriations for similar objects, viz:

For pay and subsistence of the officers of the navy, and pay of seamen, one million four hundred and eighty seven thousand two hundred and forty-four dollars, and twenty-one cents.

For pay of superintendents, naval constructors, and all the civil establishments at the several yards, sixty-one thousand one hundred and eighty dollars.

For provisions, four hundred and fifty thousand dollars.

For the repairs of vessels in ordinary, and the repairs and wear and tear of vessels in commission, five hundred and ninety thousand dollars.

For medicines and surgical instruments, hospital stores, and other expenses on account of the sick, forty thousand dollars.

For the improvement and necessary repairs of the navy yard at Portsmouth, New Hampshire, forty thousand seven hundred dollars.

For the improvement and necessary repairs of the navy yard at Charlestown, Massachusetts, eighty-six thousand three hundred dollars.

For the improvement and necessary repairs of the navy yard at Brooklyn, New York, fifty-seven thousand five hundred dollars.

For the improvement and necessary repairs of the navy yard at Philadelphia, six thousand five hundred and fifty dollars.

For the improvement and necessary repairs of the navy yard at Washington, twenty-nine thousand five hundred dollars.

For the improvement and necessary repairs of the navy yard at Gosport, Virginia, one hundred and eight thousand two hundred and fifty dollars.

For the improvement and necessary repairs of the navy yard at Pensacola, twenty-six thousand dollars.

For ordnance and ordnance stores, ten thousand dollars.

For defraying the expenses that may accrue for the following purposes, viz:

For freight and transportation of materials and stores of every description; for wharfage and dockage, storage and rent, travelling expenses of officers, and transportation of seamen, house rent, chamber money, and fuel and candles, to officers other than those attached to navy yards and stations, and for officers in sick quarters where there is no hospital, and for funeral expenses; for commissions, clerk hire and office rent, stationery and fuel, to navy agents; for premiums and incidental expenses of recruiting; for apprehending deserters; for compensation to judge advocates; for per diem allowances to persons attending courts martial and courts of inquiry, and to officers engaged in extra service beyond the limits of their stations; for printing and stationery of every description, and for books, maps, charts and mathematical and nautical instruments, chronometers, models and drawings; for purchase and repair of fire and steam engines, and for machinery; for purchase and maintenance of oxen and horses, and for carts, timber wheels, and workmen's tools of every description; for postage of letters on public service; for pilotage and towing ships of war; for cabin furniture of vessels in commission, and for furniture of officers' houses at navy yards; for taxes on navy yards and public property; for assistance rendered to vessels in distress; for incidental labor at navy yards, not applicable to any other appropriation; for coal and other fuel for forges, foundries, and steam engines; for candles, oil, and fuel, for vessels in commission and in ordinary; for repairs of magazines and powder houses; for preparing moulds for ships to be built, and for no other purpose whatsoever, two hundred and ninety-five thousand dollars.

For contingent expenses for objects not hereinbefore enumerated, four thousand dollars.

For pay of the officers, non-commissioned officers, musicians and privates, and for subsistence of the officers of the marine corps, including arrearages and increased pay under the act, second of March one thousand eight hundred and thirty-three, one hundred and thirty-five thousand eight hundred and eighty dollars and twenty-five cents.

For subsistence of non-commissioned officers, musicians and privates, and washerwomen of said corps serving on shore, nineteen thousand two hundred and thirty-one dollars and eighty cents.

For clothing, twenty-nine thousand three hundred and fifteen dollars.

For fuel, nine thousand and ninety-eight dollars.

For contingent expenses including arrearages, nineteen thousand dollars.

For transportation and recruiting, five thousand dollars.

For medicines, hospital stores and surgical instruments, for officers and men serving on shore, two thousand three hundred and sixty-nine dollars and seventy-one cents.

For balance due Lieutenant Colonel Anderson, nine hundred and fifty-four dollars and twenty-one cents.

For the erection of barracks for the marines stationed at the navy yard, Brooklyn, New York, thirty thousand dollars.

For carrying into effect the acts for the suppression of the slave trade, including the support in the United States, and for a term not exceeding six months after their arrival in Africa, of all persons removed from the United States under the said acts, five thousand dollars.

That so much of the sums appropriated by the act of the twenty-eighth May, eighteen hundred and thirty, for the relief of Alexander Claxton, as still remains due and unpaid, and which has been carried to the credit of the surplus fund, shall be, and the same is hereby, re-appropriated.

A. STEVENSON,
Speaker of the House of Representatives.
M. VAN BUREN,
Vice President of the United States and President of the Senate.

APPROVED, January 24, 1834.

ANDREW JACKSON.

In grappling for a lost anchor in the Hudson river, a little below West Point a number of links were brought up, which formed part of the great chain stretched across the Hudson river during the revolutionary war, to prevent the British fleet from passing up to West Point. The number of links recovered is fifty-one; they are said to be over a foot each in length, and averaging from thirty to thirty-five pounds each in weight. They are supposed to have diminished one third in size and weight by corrosion, and were raised with difficulty, in consequence of their close adhesion to the bottom. They were so imbedded with the rocks below, that it took three days hard pulling to bring them up, and large stones adhered to them, some weighing from 15 to 20 pounds each. The 51 links weighed 1500 lbs. A certificate of these facts is published in the New York papers, and one of the links has been presented to the New York Naval Lyceum.

FROM THE UNITED SERVICE JOURNAL, OF DECEMBER, 1833.

Observations on the prevailing currents of the Ocean and their causes.

There are few branches of science connected with the phenomena of the surface of the globe, which have hitherto received less consideration than those oceanic currents, which every where prevail more or less in the great body of the waters; and it seems surprising that, in a country situated like our own, and so intimately connected with the element which forms our rampart, as well as the great medium of our wealth and greatness, so little has yet been done to trace this continued circulation to its true and proper source.

Much expectation on this subject was lately excited by the announcement of Major Rennell's work "On the Currents of the Atlantic;" and it was but natural to expect, from the pen of so able and experienced a writer, some elucidation of this hitherto obscure subject. The expectations entertained as to this posthumous work have in many practical points been fully answered; the *existence* and *effects* of many important currents have been explained in a manner that cannot fail to be highly useful to every practical man. But in tracing the *cause* of this mysterious movement, Major Rennell seems merely to have followed the usual track that had before been taken by all former writers on the subject, and has thus been led to attribute *to the winds*, effects which owe their real origin to the main cause of these very winds themselves.

It has long been known that the prevailing currents, both in the air and in the waters, have a regular set within the tropics, from east to west; and as atmospheric currents in these latitudes, under the name of the *Trade-winds*, have been justly attributed to the rotatory motion of the earth on its axis, it has been incautiously adopted as a principle, that the currents of the ocean arise from the action of the prevailing currents of wind, both in the tropics and in other parts of the earth.

"The winds," says Major Rennell, "are, with very few exceptions, to be regarded as the prime movers of the currents of the ocean; and of this agency the trade-winds and monsoons have by far the greatest share, not only in operating on the larger half of the whole extent of the circumambient ocean, but by possessing greater power, by their constancy and elevation, to generate and perpetuate currents; and although the monsoons change half yearly, yet the interval during which they continue to blow in each direction is long enough to produce effects *nearly similar to the constant trade-winds;*" that is, although the winds do not always blow from east to west, but are, during one half of the year, *north-easterly*, and for the other half, *south-easterly*, yet the currents in the open ocean, within the tropics, are *constant*, from east to west, *and thus*

do not follow the direction of the winds from which they originate. "The winds then," concludes Major Rennell, "operating incessantly on the *surface* of the ocean, cause, in the first instance, a gentle but general motion *to leeward*, (as is proved by ships being always to leeward of their reckoning in the trade-winds;) and the waters so put in motion, form, by accumulation, streams of currents."—*Rennell on the currents of the Atlantic*, p. 6.

Setting out, then, upon this principle, in his account of the existing currents of the ocean, as far as they are at present known, it cannot excite surprise, especially if this theory of the origin of the currents can be proved to be erroneous, if many facts are stated in the work of Major Rennell, which are utterly at variance with the theory itself; and the consequence naturally is, that, however distinct and instructive the information may be with respect to the individual currents, and the best mode of combating their influence, we rise from the perusal of the work more than ever uncertain as to the true *cause* of those remarkable streams which are known, in numerous instances, to run in the very face of the steady and prevailing winds which are here stated to be the occasion of them.

In these observations upon Major Rennell's work, we must not be understood, however, as detracting in any way from the highly useful tendency of it in a practical point of view, for which it was chiefly intended; but we beg to offer a few remarks as an attempt to elucidate this obscure but interesting subject, which, like other questions relating to an extended system, must first be viewed on a great and general scale, before we can safely venture to account for the minor portions of it, which come within our more immediate and personal observation.

It appears strange that, while the aërial currents of the atmospheric fluids within the tropics have been so long attributed to their proper cause, it should never have occurred that *the same cause* might probably have *the same effect* upon the aqueous fluids which cover so large a portion of the globe, and that the currents of the ocean might thus be mainly attributed, like the trade winds, to the rotatory motion of the earth upon its axis. The more powerful and constant of the currents of the tropics, having a general tendency from east to west, might be supposed likely to suggest this idea. But if suggested, and put to the proof by actual observation *on a limited scale*, it is probable that the theory would be rejected as inconsistent with the facts; for while the trade-winds are found to be in a great degree constant, like the cause which produces them, and only varying a few points to the north or south, according to the season, and the position of the earth with regard to the sun, the streams of the ocean are found to set in various directions, and frequently in *opposition* to the supposed cause; we could not, therefore, feel surprised if some other cause was immediately sought for.

In order, however, to set this point in a proper light, we have only to examine with attention the effects produced by a rapid and

rocky descent on the small scale of a river or brook. We here find the general tendency of the stream taking *as a whole*, a decided course, (say from east to west;) but if we confine our view to the minor parts of this stream, and watch the movements of any small floating substance, as it follows the various eddies and counter-currents occasioned by the rocky impediments in the bed of the river, we shall with difficulty bring ourselves to believe that the general tendency of the whole stream is from east to west, as we frequently find the floating bodies taking a direction from *west to east*, and, at some particular points, even from north to south. This is taking a limited view of what ought to be considered on a wider scale, and may serve as an illustration of what actually takes place when we form a theory for the whole currents of the ocean, by merely observing some particular portions of it.

What takes place in a fluid on a small scale will assuredly occur also on a larger, as both are subjected to the same general laws; and because the trade-winds are not so subject to opposition, and consequently to eddies and counter-currents as the equatorial streams of the ocean, we are not therefore to conclude that both fluids are not originally set in motion by the very same cause, for it is obvious that, though their general tendency may be (as indeed it really is) *from east to west*, the numerous interruptions opposed to a regular movement in that exact direction may often occasion an extensive re-action in a direction to all appearance opposed to it.

Let us, for a moment, suppose the earth to be a body *at rest*, or at least without rotation on an axis; and let us further suppose no dry lands to exist above the surface of the waters, with which latter the sphere would thus be entirely covered. Let us also in idea remove its atmospheric envelope, that all friction or pressure may be removed between the two fluids of air and water—what, then, could we expect to find under such an arrangement? We could not look for any circulation in the watery covering, under such circumstances. Every thing would remain in perfect repose; and unless the waters were preserved in purity by some principle not now in existence, they would soon become corrupted and unsuitable to the nourishment of organic life. But let us now suppose a sudden impulse of rotation to be given to the sphere with its fluid covering; and let us consider what would be the effect of the rapid rotatory movement upon the circumambient waters. If a plate or other shallow vessel containing water be impelled in any direction horizontally, the fluid, participating but little in the impulse, *is left behind* on the spot whence the movement began; it cannot keep pace with the motion of the solid. In the same manner the globe would revolve upon its axis, while the superficial waters would remain nearly stationary, and would have all the appearance of moving in opposite directions, *seeming* to transport floating bodies from east to west, while, in point of fact, the earth *was passing them* from west to east. Thus we perceive that, in the supposed case which we have now put, the steady movement of the

solid ball would be imperceptible, while floating bodies on the surface of the water would visibly become more distant in an opposite direction. This apparent movement would naturally be greatest in the equatorial regions, being the outer rim of the revolving wheel; while towards the axis the waters would be little, if at all, affected by the rotation.

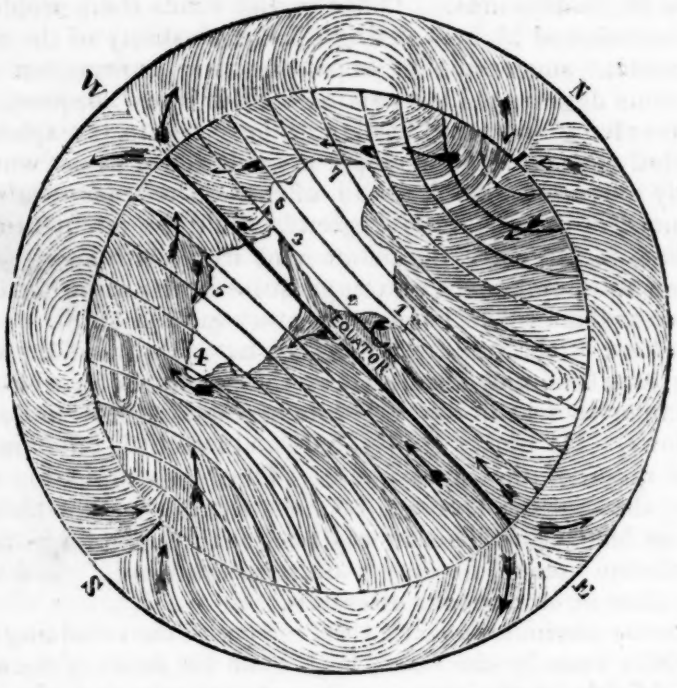
Let us now, for a moment, suppose our globe to be surrounded with its atmosphere, or envelope of fluids of a different nature. Without rotatory movement in the solid, there could be no semblance of regular movement in this aërial fluid, and we could therefore have no trade-winds. Other partial winds there would be, it is true, occasioned by heat acting on the elasticity of the air, and by a constant succession of expansion and contraction arising from various degrees of temperature. But if we suppose, as before, a revolving and rapid motion to be given to the sphere thus surrounded with its airy envelope, a similarity of cause would immediately occasion a similarity of effect. The *trade-winds* would be produced in the equatorial regions, while the circulation of the atmosphere in the more temperate and frigid latitudes would be carried on by the changes of temperature in the same manner, or nearly so, as if there had been no rotatory motion at all.

This effect of the trade-winds, and, by analogy, of the oceanic currents, may be simply illustrated by the example of a well-mounted horseman in a calm day. While he remains still, not a breath of air blows. He moves slowly, but produces little effect in deranging the quiet of the atmosphere. The more rapid his course, however, the more violent will be *the current of air* which *seems* to blow in his face whichever way he goes; and even in the case of a moderate breeze, he may "outstrip the wind," and make it seem to blow in an opposite direction.

It must be obvious then, that the effects of the revolving motion of our globe must be the same, both upon *the fluids of the air*, and upon *the fluids of the ocean*, and consequently that the regular *trade-winds*, and the regular *equatorial currents*, proceed each separately from this cause, and would equally exist even in the absence of the other. But it may be urged, that the trade-winds are much more constant to their course than the equatorial currents, and it therefore seems difficult to imagine that they can both proceed from the same cause. The reply to this objection is extremely simple, when we look a little deeper into the nature and circumstances of the two fluids. The atmospheric fluid is above the surface of the solid, and is but slightly deranged by the asperities and interruptions it may have to encounter, in the form of the islands, continents, or mountains of the earth. Some derangement actually does take place, however, from these causes, but it bears no comparison to the counter-currents and eddies which are found in the ocean, arising from the numerous and insurmountable obstacles which are thrown in the way of the regular equatorial streams. In the supposed case, which was before put merely for illustration, we considered the globe to be entirely covered with the waters.

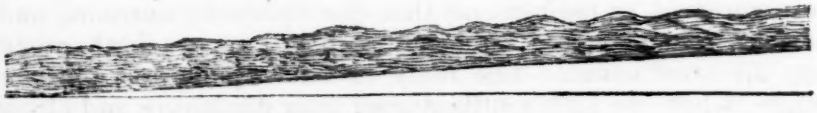
Such is not, however, the reality now, although this preternatural effect has certainly existed, on one most memorable occasion, the evident traces of which attest the fact, on every part of the surface of the globe. Such is not, however, the usual state of things; on the contrary, the ocean occupies about two-thirds of the whole surface, while the remainder is broken into a thousand dispersed fragments, each opposing its solid form, as the sphere revolves, to the regularity of the oceanic movements. If the smooth and po-

Fig. 1.



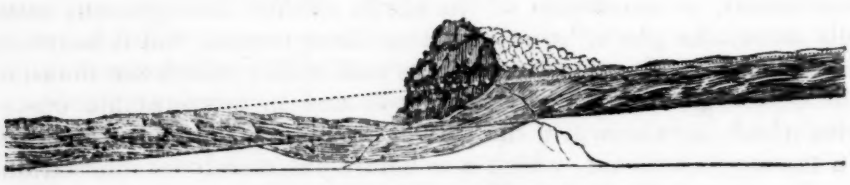
Theory of the general System of the Currents both of aqueous and aërial Fluids.

Fig. 2.



Unopposed Current.

Fig. 3.



The consequence of opposition.

lished wheel of the turner be made to revolve in water, the movement, however rapid, produces little or no commotion in the fluid; but let the polished wheel be changed for one having a toothed or unequal edge, and we shall instantly perceive a very opposite effect. The effects of the paddles of the steam-boat on smooth and tranquil waters will also bring this subject home to the mind of every one. We cannot then look for the same regularity of movement in the equatorial currents of the ocean that is perceptible in the equatorial currents of the atmosphere.

In considering the origin of the currents of the ocean, it must be kept in mind that they proceed from two distinct causes, and thus exhibit one of the most wonderful and provident effects to be seen in the order of the works of the Creator. Water and air, if left stagnant, soon become corrupt and unwholesome; and it is evidently a wise provision of the Almighty, which has furnished the laws by which a constant circulation and movement are kept up in both. In the case of the atmosphere, the circulation occasioned by the *winds* takes place, partly by means of the revolutions of the earth on its axis, and partly by the expansive nature of air when affected by the heat of the sun. The lower beds of the atmosphere are elevated into the higher regions by heat; and other portions of the fluid, rushing in to fill up the vacuum, occasion streams of wind of various degrees of force. The seasons of the year, and the duration of the effects of summer and winter in various latitudes, also occasion similar currents of air more or less durable, according to circumstances. But in the case of the currents of the ocean, there are but two causes from which constant currents can primarily arise; one from the rotatory motion of the earth, from *west to east*, which causes an *apparent* current from *east to west* in the open seas near the equator; the other cause arises from the inclined position of the earth with regard to the sun, by which a greater *evaporation* takes place from the waters of the sea within the tropics, than in the more temperate and frigid zones; and on the other hand, a proportioned *condensation* of this vapour (in the form of rain, dew, and snow) takes place in the latter regions, greatly superior in quantity to what falls, during the whole year, in the former. These effects of temperature are so vast, when viewed upon the scale of the whole earth, that the balance of the ocean would be deranged by them, thus *losing* water in one region, and *regaining* it in two others. This want of equilibrium is, however, obviated by constant currents in the ocean, from the poles towards the tropics*. In figure 1, of the preceding

* It is probable, perhaps even certain, that *heat* has also a very considerable influence in keeping up the movement and circulation of the waters, but it is not likely that currents of great extent are set in motion by this cause. Water, like air, expands by heat, and contracts by a certain degree of cold, not, however, so low as the freezing point, for at that temperature ice is formed, and the formation of ice is always accompanied by violent expansion, so great, indeed, as to burst the strongest vessels, and to cause explosions like cannon, in the lofty glaciers of Alpine regions.

plate, (where the outer line denotes a supposed boundary to the atmosphere) we see the vapours rising from the equatorial regions, and passing towards the poles, where they return to their parent deep, in the form of dew, rain, and snow. Thus restored to the ocean, they flow towards the tropics, and there chime in with the prevailing currents, in their course to the westward. In the central part of the same figure an idea may be formed of the effect of an intervening continent, in opposing its solid form to the fluids through which it is rapidly and constantly passing, with greater velocity than those fluids can possibly follow it. At 1, the equatorial current meets an opposing cape which divides it into two parts; one flows pretty freely from the north-west, being kept, however, in its place by the north polar currents pressing towards it. It meets another projection at 7, still farther to the north; and after passing it, the stream is *forced* into its more natural position near the equator, and proceeds in its westerly course, after forming a great counter-current or eddy in the sheltered gulf at 6, where navigators would fall in, for days together, with what would appear, if viewed on a small scale, totally opposed to the theory now under explanation. Returning to the cape at 1, we find the other half of the northern equatorial stream proceeding to the south-west, where it fills the deep gulf, or sea, at 3, and keeps up the waters there at a high level, on a principle which will immediately be explained. It cannot, however, make its escape in a body or current from this gulf, but, being confined by the southern division of the equatorial stream, a variety of eddies on a considerable scale are produced at 2. It is unnecessary to explain the figure further, by proceeding to the southern hemisphere, where similar effects are produced by nearly similar causes at the points 4 and 5; —we may therefore proceed to explain upon what principle the level of the sea in the gulf at 3 is kept up at a higher level than the same surface in the bay at 6, an effect which is known to exist in several remarkable instances on the globe, and which, according to the theory, ought to exist in every situation similarly situated.

By fair analogy, we find that, in this, as in other parts of nature, what takes place on a small scale may also be looked for on a larger. Proceeding then upon this principle, and considering minutely the rapid and rocky course of a brook or river, we find that, so long as the water flows over a smooth and equal bed, the depth and surface of the stream are in all places alike, as in figure 2 of the plate. But when, on the other hand, a fixed and solid opposition is encountered in the form of a projecting rock, derangement in the level instantly takes place, to a degree proportioned

---

As warm water rises above the colder, (except in the extreme case of ice, which always floats,) and as currents and counter-currents are always acting *horizontally*, and then intermixing the fluids from the poles and from the tropics, it is obvious that an interchange must also be constantly going on *vertically*, in the waters of the ocean, and thus completing the circulation of which the great superficial currents, already described, are the leading cause.

to the bulk of the opposing object. An accumulation or rise in the water takes place on the upper side, until the current finds a vent at one or both extremities, and without this vent, the accumulation increases until the water flows over the top, when the difference of level above and below the object is at once apparent (see fig. 3.). But supposing the impediment to be small, in proportion to the size of the stream, still, in every case, a change of level must be the consequence; and the recovery of tranquillity is only completed at some distance below the object, where it, at length, falls again into the general inclination. Beneath or behind this opposing rock, then, there is a sheltered nook upon which the stream can only act in the form of an eddy; and in such nooks, buoyant objects are often kept, as it were, imprisoned by the force of the stream on each side, and floating round in one continued circle. These eddies of the smaller rivers are equally well known to fish and fishers, as both are there sure to find their wished-for prey. Now, all these effects are to be expected on the great scale of the ocean current, as well as in the smaller instance of an inland brook. The *streamward* side of these mighty rivers will always be found on a higher level than the *eddy side;* and consequently the inland gulf at 3, (fig 1.) ought to be considerably higher than the waters in the bay at 6, which remains sheltered from the powerful action of the current. Thus the level of the Red Sea, which is filled and kept up by the action of a powerful stream across the Indian ocean, was found, by the French engineers, to be so considerably higher than that of the Mediterranean, that much difficulty and expense would have been incurred in the canal which was once projected across the isthmus of Suez, in order to facilitate the communication with India by this route. A second instance of this effect no doubt exists in the gulf of Mexico, compared with the level of the north Pacific on the western coast of Mexico; but the actual difference of level has not yet been ascertained. A remarkable instance, however, of this difference of level, obviously arising also from the above cause, has been kindly communicated to us by Sir Howard Douglas, who was then governor of New Brunswick, where it was found that, in a proposed canal intended to have been cut from the top of the Bay of Fundy to Bay Verte, in the Gulf of St. Lawrence, (a distance by land of only fourteen miles,) the difference of level of the two seas was no less than sixty three feet,* the rise of the tide in Bay Verte being only seven feet, while that in Cumberland Bay, of the Bay of Fundy, exposed to the full force of the Gulf-stream, was seventy feet. The Bay of Fundy is kept at this high level, in consequence of the projecting peninsula of Nova Scotia impeding the current which rushes along that coast towards the north, and which, from the bend of the coast towards the north-east, is carried in that direction, leaving the gulf of St. Lawrence as a sheltered eddy or nook.

We may now proceed to a cursory view of the whole existing

* Surveyed by Mr. Francis Hall, and reported upon by Mr. Telford.

system of the currents, as far as the observations of navigators have made us acquainted with them; but in the rapid sketch which is alone consistent with the limits of a paper of this description, it would be impossible, and even injudicious, to be led from the general outline into any notice of the innumerable minor currents of which seamen have frequently made mention, and which may often be looked on as eddies and counter-currents, produced by the main body of the stream,* and, being occasioned by a variety of changing circumstances, may not again be found in the same exact position.

As it is necessary, in this circuitous course, to start from some particular point, which may be considered, as it were, the commencement of the circle, we may adopt, as the most proper, the western line of the continent of America, whereby the circle is more nearly broken, from pole to pole, than by any other of the dry lands of the earth. Setting out then from this point, and viewing, more especially, the equatorial line of currents, we enter the immense expanse of the North and South Pacific, where every account that has touched upon the currents tends to establish the fact of their westerly course; and as the force of these currents must there be more steady and equal than on any other part of the globe, from their being unopposed by any thing more important than clusters of small islands, we should not expect them to assume that dangerous and impetuous power by which they are frequently distinguished in the Chinese sea, and in the Atlantic. Mr. Mariner and other navigators have given us some interesting proofs of the existence of westerly currents, in the adventures of parties of natives, passing from one island to another, being carried to a distance of many hundred miles, and being found on islands from whence they were utterly hopeless of ever being able to regain their native shores. Of this portion of the globe, however, it must be admitted that we as yet know but little with regard to the currents. But if we find in the Indian Ocean, and in the Atlantic, a series of well-established facts, in support of the system now under consideration, we have a full right to extend it, by analogy, to the less-visited parts of the globe, especially when corroborated by the few but striking facts just alluded to. Proceeding, then, in a westerly course, and having reached the western bounds of the Pacific, with the Chinese islands and shores on the one hand, and the continent of New Holland on the other, we hear of a succession of powerful currents from the eastward, forcing their devious courses through the crowded archipelago, and pointing towards the east coasts of Africa. Here the currents of both sides of the equator, being con-

* Major Rennell's work on the currents is accompanied by a laborious and valuable volume of charts, which, if any objection could be made to them, might be considered so minute as to produce confusion. It appears that the course of the minor eddies has been laid down wherever any naval authority could be produced for their existence, although it is more than probable that a large proportion of them may not again be found in the same position by future navigators.

fined in a much smaller space than in the Pacific, and being forced by the form of the land out of that position which is naturally given them by the rotatory motion of the earth, become more violent, and consequently more obvious. In their efforts to retain their position north of the equator, they act with great force against the shores of the seas of Bengal and of Arabia, occasioning, in the former, the well known and formidable surf of Madras. Finding no vent in a northerly direction, the united stream is forced to the southward along the east coast of Africa, and if left at liberty, it would follow the southerly impetus thus given to it, and flow into the southern ocean. In this, however, it is opposed by the south polar currents, and it therefore, no sooner arrives at the Cape of Good Hope than it doubles that point, in the well-known Lagullas stream, and, running in a north-westerly direction, hastens to regain its natural position on each side of the equator. The force of this current off the Cape is so great, that nothing but a prevalence of westerly winds at some seasons could enable outward-bound ships to make head against it; and even with these favorable winds, ships are constantly found driven to the westward, in the very face of the wind.

In following out the course of the equatorial stream, across the Atlantic, we find it in part crossing the equator obliquely, and this great moving mass of waters, striking upon the eastern point of Brazil, is divided into two streams, one driven to the southward by the form of the coast of South America, until it is forced round Cape Horn, as it had before doubled the Cape of Good Hope, and joins in with the waters of the Pacific; the other, taking a north-westerly course towards the Caribbean sea and the Gulf of Mexico, passing with considerable force amongst the islands of the West Indies. Having reached the Gulf of Mexico, which opens its extended arms, as it were, to receive it, the current is there brought to a full stop, being precluded from advancing to the westward, or northward, by the form of the lands, and the waters being in consequence *accumulated* into a higher level than perhaps in any other known position of the whole globe. This elevation has often been *supposed*, and has even been shown to be demonstrably certain, without, however, any good reason having been assigned for the phenomenon. We here, therefore, find a natural, and even necessary cause, upon the same principle as has been already explained by fig. 3 of the plate. The high level of the sea in the Gulf of Mexico cannot, however, pass a certain boundary, and the swell of waters at length finds relief, by the only possible though tortuous course that is left open for its issue. The stream then rushes with a violence proportioned to its late confinement, round the south point of East Florida, and here, taking the name of the Gulf-stream, it proceeds to the northward, along the coasts of the United States to Newfoundland, where it encounters the Great Bank and becomes again divided, one portion continuing towards the north and east by Iceland and the coast of Greenland, until again stopped by the north polar currents; and the other bending to the

east and south, is terminated in an immense vortex in the centre of the north Atlantic, where it accumulates on the surface prodigious quantities of the *fucus natans*, or Gulf-weed, which is known to flourish in the warm waters of the Gulf, and to be carried by the stream into the Atlantic, and there covers the surface for hundreds of miles, together with floating timber and other bodies, washed out by the rivers of America. In this great eddy, then, the famous Gulf-stream may be said to terminate; but not so the other portion of the current which had passed on towards the north; when, met by the north polar currents from the arctic seas, it is headed back towards the south, along the coast of Norway, and into the North Sea. We here feel its effect upon our own coasts, especially of the north of Scotland, and of Ireland, where floating substances from southern latitudes are frequently found. A minor branch passes through our channel, and rejoins the greater stream across the Bay of Biscay; and the whole at length becomes blended once more in the equatorial current off Cape Verde and the coast of Africa.

In an interesting work which has recently appeared—the Narrative of Capt. Owen's Voyages for the survey of the coasts of Africa—we have a distinct proof of the great obscurity which still overshadows the subject of the currents. In the observations on the results which have been gained by this long, interesting, and most fatal expedition, we find the greater part of the subject connected with the currents, summed up in the following passages, at the end of the work.

"As in the foregoing narrative but few observations have been introduced respecting the currents, and as it is a subject of much speculation and interest, at least to those connected with navigation, the following remarks from Captain Owen's Journal may be considered worthy of publicity.

"It is a well-known fact, as regards the African seas, *that there is a perennial current which sets into the Atlantic Ocean*, round the entire southern extreme of that continent; this current varies in its velocity in different situations, and at different periods, from five miles to one mile an hour. Some writers have supposed that, with reference to the Great Ocean, the Atlantic may be considered as a kind of mediterranean sea, the evaporation from which, together with winter frosts to the northward, must be supplied from the Southern Ocean, in like manner as the Mediterranean is fed from the Atlantic; *and this hypothesis is borne out* by the strong perennial currents about the shores of Cape Horn, and through the islands in its vicinity. But it is remarkable that these currents never appear to extend more than *twenty leagues beyond the common deep-sea soundings*, while their velocity is much decreased when near the shore; from which it may be understood that the depth is much diminished, and the stream broken by projections of bank and sand.

"Ships are frequently carried to the westward, quite round the Cape of Good Hope, *even against the strongest north-west gales* by this current."

Captain Owen then proceeds to state the dangerous nature of the short though *high* waves produced by the currents and wind being in opposition, and the most effectual course by which the danger may be avoided. It is quite clear that every thing here stated is strictly in accordance with the theory here advanced. He bears witness to the *constancy* of the current from east to west; and in other parts of his work, when treating of the east coasts of Africa, and those of Madagascar, he mentions the rapid nature of the currents *passing down from the northward towards the Cape*, by which, in one instance, the Leven, in making the point of Mombas, was driven so far to the southward, that it took her *six days* to regain what she had lost by the failure of the wind for about *three hours*.—Vol. ii. p. 150.

It is known also that, off the Cape, ships have been driven to the westward, at the rate of sixty or seventy miles per day, *even against* a strong westerly wind.

The only part of Captain Owen's statement which in any degree stands opposed to what is now advanced, is the allusion to the constant currents at *Cape Horn*. These are not *stated* to run to the eastward, or *into*, instead of *out of* the Atlantic, but that fact is implied by the theory of *evaporation* from the Atlantic, which is counterbalanced by *entering* currents at both capes. This is opposed by the general reports of the navigation of Cape Horn; it is opposed also most distinctly by the much better attested facts of currents *out of* the South Atlantic towards the north. For if evaporation took place on so great a scale as to produce *entering* currents at the two great capes, we must admit that an *entering* current should also flow from the colder latitudes of the north, which is not the case. As to the fact of the current at the Cape being little felt *close in shore*, and gradually diminishing in force as it extends to the open ocean a hundred miles or more from land, it is in every way consistent with the whole theory of inland rivers. In the case of a projecting bank or rock in a river, the actual point of contact is exposed to great violence, but every other point of the stream exhibits the phenomena described by Captain Owen off the Cape. Under the most projecting rock or point comparatively smooth water is generally found close to the side; while the main body of the stream drives past, with a distinct and rippling outline, diminishing in force, however, as it spreads out into the expanding pool below.*

---

* Major Rennell gives many interesting instances of bottles and other bodies carried by the currents. In one case a bottle was thrown overboard from the Osprey, of Glasgow, on the 17th January, 1822, in 6° 13′ south latitude, and 15° 35′ west longitude, and it was found on the 27th July, of the same year, in Mayard Bay, in the island of Trinidad.

In another case, still more remarkable, a bottle was thrown from the American ship Lady Montague, on the 15th October, 1820, two leagues north-east of the island of Ascension, and was pickd up *on the west coast of Guernsey*, the 6th August, 1821, and notice of it sent to the Admiralty. It is certain that this bottle must have passed, in ten months, over the whole course of the Gulf-stream, and from thence been carried (probably by the coasts of Iceland) into the North

We have thus passed in review the great and leading course of this wonderful and most admirable system by which the waters of the ocean are kept in that continued movement so necesssry to their purity, and by which also it is highly probable that many important ends are effected, in regard to the amelioration of the climates of various parts of the earth. The land and sea-breezes of the hotter climates are now well known and also their causes; we may naturally suppose this wholesome interchange to be powerfully affected by streams of current from the cooler latitudes; and we also may be assured that the heated waters of the Gulf-stream must carry along with them into the Frozen Ocean a degree of warmth which cannot but materially affect the rigidity of those latitudes. Even in our own country we are well aware, from continued experience, of the mild effects of a westerly wind. We have no particular warmth to look for from the *lands* to the westward of us; on the contrary the winters of Labrador and of Canada are well known to be unusually severe. But when we find that a vast reservoir of heated water, and consequently of *warm vapours*, exists in the Atlantic, we can no longer find a difficulty in naturally accounting for the mild and humid effects of our westerly winds, which, even in winter, produce on Ireland, and the west coast of Britain, the verdant growth of a milder season.

It is scarcely necessary, in conclusion, again to revert to the theory of the winds being the prime movers of the currents; for besides the arguments already adduced, by which, we trust, it has been shown that ocean-currents could not but exist, even if there were no winds whatever, we have only to examine the numerous instances mentioned even by Major Rennell, of ships being drifted far to *windward*, in the very teeth, not of transient breezes alone, but of settled and heavy gales. "One ship," says he, "was carried 10° of longitude *(equal to* 570 *miles)* to the westward, between Cape Verde and the Cape of Good Hope, and yet had been subjected to the south-east trade-wind. Another was driven 220 miles, between the Canaries and the coast of Brazil. Another, in the equatorial current, in June and July, was set 297 miles to the westward, *in five following days*, between 3° north and 4½° south, and yet had entered the south-east trade-wind." Such, and numerous other instances, well known to all seamen, are sufficient to show that the currents must be set in motion by some much more powerful and less *superficial* cause than the mere *friction* of the winds, however fixed or severe. That the winds agitate the *surface* of the waters no one will attempt to question; but that this agitation can extend to the vast depths, at which the law of fluids above explained must operate, we have not the slightest reason to suppose. Major Rennell brings forward, in proof of his theory, the well-

---

Sea, and through the English Channel. We cannot, however, decide from this, or almost any instance of floating bodies, as to the *rapidity* of the current; for we cannot tell how long it may have been detained at various points, nor how long it may have remained on the spot where it was eventually discovered.

known fact, that the surface of a canal, or of a lake, is always higher at the *leeward* than at the *windward* side. This fact is at once admitted, but it is one of very small effect, and merely *superficial*, being occasioned by *waves*, and instantly subsiding with these waves. But in order to prove the point, it must be shown, that in a straight canal of several miles in length, with a strong breeze right on end, the force of the winds, near the middle of the distance, (where they must have acquired their full force,) can affect an object of no great weight *at the bottom of the canal, and at a depth of four or five feet.* If this effect takes place in canals, or large inland lakes, such as those of North America, and also at considerable depths, the theory might be supposed to derive some support from it. But this is not the case; and in inland lakes, of whatever extent, although the surface may be raised on the leeward side, in violent winds, objects deposited at a few feet of depth lie perfectly secure and unmoved.

The winds would not, therefore, effect the end for which the great circulation of the waters of the ocean is obviously intended; and any theory of the currents, which is mainly founded on so false a ground, however ably it may be treated, cannot but mislead the mind, and in many instances prove injurious, not only in a scientific, but also in a practical point of view.

PROMOTION OF THE RANK AND FILE OF THE ARMY.

It is with reluctance I so often trouble you; but really there are many things in the Army which call for reform. I do not wish to insinuate that, *meaningly*, any thing exists that our superiors would not remedy, if they reflected sufficiently upon the subject; nor do I pretend to cast negligence upon their shoulders. It is only for the want of a little reflection on their parts, in things considered as *little matters*, so easily overlooked, that I wish to call their attention; nor do I wish to be understood that the subject I intend mentioning is a little matter; but as, perhaps, you may think I do not know what I want to say, I will come to my old and ever to be admired theory—facts. My subject will be

PROMOTION.

As the facts *now* exist: Our Army! Our *little* Army! Our Army of Freemen! *Our Army!* A name dear to the heart of every individual in this vast, enlightened, and happy country; yes! this Army is constituted upon a basis far more illiberal than the armies of Europe, whose whole, sole, and entire meaning and in-

tention is subordination. Our *efficient* Army—what hallowed words are these! what ideas do they convey! But let not those hallowed words be blasted by the want of others, such as support, protection, *promotion*. I am, quite likely, out of my latitude, and will endeavor to regain my point.

There is now no inducement for respectable young men to enter the Army. This is a bold assertion, but true, nevertheless. A young man may now enter into the American Army; he may be all that is required of him, (which is saying a great deal,) he may expose his constitution day and night—he may deprive himself of many little comforts, through a feeling of pride—in fact his conduct and his services may be such, as would, in civil life, realize to him $1,000 per annum; and what does he gain by this good conduct and all these exertions? Nothing—no! not even the *hope* of emolument or promotion. As to emolument, it is what we do not look for, do not expect—but *promotion* is what we ought to expect, and we hope sincerely that it may be what those, who aim by good conduct and perseverance to attain, may be allowed to strive for.

I do not think it is amiss, nor are we to be reprehended, to look into matters which are considered above our sphere, provided, as I have often stated, we adhere to *facts*. Now, look at our officers, and who are they? Not for one moment do I mean to derogate from their character. Many I esteem, all I allow to be gentlemen. Still do I repeat, who are they? Are they not those whose fathers, through fortunate circumstances, happened to get them to West Point? And I leave it to themselves, are there not many, yes, very many, equally deserving, in the Army, who cannot rise by dint of every perseverance and the utmost industry to that eminence, which they attained through their fathers? The answer may be, the *respectability of family* of the parties. Oh! may our free and happy government never be tainted by this cant say of *respectability of family;* it is a moth which eats and eats, and will bring down monarchy upon our heads! We will allow, for the sake of argument, that there is more of what is called respectability of family among the officers than among the privates; does *family* constitute the basis of our army? Where would be our drill officers, if family, or *family influence*, were alone to be looked to? But though I am only a *non com.* as a friend of ours, now a Member of Congress, (who shot at a *coon* but could not bring it down,) observed, I would ask, *is it republican?*

The present state of our army is this: a young man of the most respectable connections, through adverse fortune, may enter into it. Perhaps, notwithstanding all his exertions, all his endeavors to please, all his privations, it may be three years or more before he is made a corporal; perhaps three years more before he is made a sergeant; three more before made first sergeant, and *perhaps*, at the expiration of ten years of perfect drill, a thorough acquaintance with military tactics, he may rise to the highest grade that can possibly be bestowed upon him, sergeant major. Notwithstanding all this, it is a fact that our army contains many young men of

the most respectable families, who have received liberal educations, and many among these who entered the service with their eyes open, for no other reason than the *wish* to become soldiers; others by the frowns of fortune. Now, if the army, under the disadvantages stated, is respectable, how much more so would it be, if there were *inducements* for respectable young men to join it; and what would be an inducement? why *promotion!* I have said that our army was constituted upon a far more illiberal basis than the armies of Europe: to prove it, let us take a glance at the French marshals and generals. Most of them were poor, indigent, and of scant education, who rose to their eminence from private soldiers.

General Augereau was the son of a green grocer, who entered the Neapolitan service early in life, and at thirty years of age was still a private; he was compelled, on account of being suspected of revolutionary principles, to quit the Neapolitan territory; at thirty-five he became a volunteer in the republican army of the south, and rose from grade to grade, and in 1794 was made brigadier general.

Bernadotte, the most fortunate of Napoleon's generals, was the son of an attorney in moderate circumstances, and enlisted as a *private* in the royal marines. In the year 1789, he was only a sergeant, and in three years afterwards, 1792, he was a colonel.

Marshal Bessieres was born of very humble parents, and in 1791 entered as a *private* in the constitutional guard of Louis XVI. and in 1804 was made a marshal of the empire.

Marshal Gouvion St. Cyr was born of parents in moderate circumstances, and was intended for a painter. A short time previous to the breaking out of the revolution, he enlisted as a *private*, and in 1795 he was a general of division.

Junot was the son of a small farmer, and at an early period he enlisted as a *private* in the army.

Marshal Lannes was the son of a poor mechanic, and was himself intended for a similar course of life, but when about being bound apprentice to some humble calling, he absconded and enlisted into the army as a *private*. This was about the breaking out of the revolution, and in 1795 he had attained the rank of chief of brigade, and in 1796 he was made colonel.

Marshal Lefebvre was born of humble parents; at the age of eighteen he entered as a *private* in the guards; in 1788 he was made a sergeant, and in 1792 a captain of light infantry; in 1793 he was raised to the rank of adjutant general; and in 1804 the dignity of marshal of the empire was conferred on him.

Marshal Massena was left an orphan in his infancy, and his education was a good deal neglected; at the age of seventeen he entered the army as a *private;* he soon was made a corporal, and in a few years he was made a sergeant; and in 1804 was a marshal of France.

Marshal Moncey entered the service as a *private.* In 1789 he was only a sub-lieutenant; in 1791 he was captain; in 1794 chief of battalion; and in 1804 was marshal of France.

Marshal SOULT entered the army as a *private* at the age of sixteen, and soon became sub-lieutenant of grenadiers. In 1794 he was chief of the staff to General Lefebvre; in 1796 he was appointed general of brigade, and is now minister at war to Louis Phillippe; he was born of humble parents.

The above are a few out of numerous cases where, in the French army, *privates* have risen to the highest distinction. We will grant that it was through good and exemplary conduct they gained their eminence; but are there not hundreds of cases of exemplary conduct in the American army? Yes, there is as much bravery, skill, correctness of deportment in the American army, as in any other in the world; and still does the American soldier continue to be looked upon by society at large as a *degraded* being.

In the British army, a private by his knowledge of drill, and by his correctness of deportment, can rise to be sergeant major. It is then usual for him to be *recommended* for an ensign: and nine cases out of ten, such a private may have the chance of rising to the highest distinction. In fact, in every other service, the *private* MAY rise to eminence. But to the *United States soldier*, it is denied to him, let his conduct be what it will.

After explaining, as well as my poor ability will admit, the *grievance*, I do not think I can offend any one by giving my ideas of what ought to be the remedy. I wish to force no one to my own ways of thinking, if they are not correct: but if found correct, and worthy of notice, I trust notice will be taken of them.

My ideas are, that in every regiment there should be a yearly examination of privates, corporals, and sergeants; this examination to be made by a board of officers. In this examination, if a private soldier *should deserve it*, let him be made a corporal. If a corporal *should deserve it*, let him be made a sergeant; and if a sergeant *should deserve it*, let him be *recommended* to the department for a third lieutenancy; and let his future promotion rest on his own merits.

This is a short statement of my ideas; but as short as it is, it comprises what I should suppose would be an inducement for young men of the first respectability to enter our service as *privates;* and when such is the case, then will our army be a source of pride and gratification to every heart that throbs for the welfare of his country.

I will ask this simple question—where, before the establishment of the military academy at West Point, were our officers obtained, but from the rank and file of the army: and who were those officers, thus obtained? Our old and war-worn warriors; not dandled in a nursery *established to make* soldiers—but soldiers as soldiers should be, accustomed to fatigue, privation, &c. &c.

My ideas, though written in a hurried manner, I believe are correct. My object is only to show the true statement of the case, and I leave to an abler pen than mine to discuss its merits.

PULASKI.

RECOLLECTIONS OF A SAILOR.

The troops were all embarked, and the signal was flying from the Commodore's mast head, interdicting all communication with the shore, to prevent, it may be, the temporary tenants of our floating barracks, from conveying any information relative to the destination of the expedition; a precaution which might seem somewhat unnecessary, as that circumstance was known only to its *god-fathers*, the Heads of our military and naval frontier service.

The wind which had for some days been blowing fresh from the westward, now gradually subsided, and at the dawn of the 25th of April, 1813, the signal "underway to get," was run up, and immediately the sounds of the Boatswains and their mates throughout the fleet, piping, "all hands unmoor ship, ahoy!" broke rudely on the silence of the morning. All was bustle; the rigging of our little fleet became instinct with life, and in a few seconds, the "sail loosers" gave the white canvass to the wind, amid the creaking of blocks and cordage, as the topsails walked to the mast-heads, to the tramps of a thousand feet, and the shrill music "of the wry-neck'd fife."

It was a lovely and a busy scene, as each vessel, filling away in the wake of the broad pendant, careened gracefully to the influence of the breeze. It was a scene, too, of sadness, as well as excitement. Bound on an enterprize, we knew not whither, a thousand recollections of home, kindred, and friends, rushed to the heart, while hopes, and doubts, and fears, alternately prevailed and vibrated in every bosom.

In a short time we were clear of the harbor, and passing along the bay, the decks, hammock-cloths and booms, were covered with a dense and living mass, gazing steadfastly and anxiously on the tented village, as it became gradually lost in the distance. The "outer islands" were soon far behind, and the broad surface of the lake received us on its wide-spread undulating bosom. It was now that we were authorized to break open our sealed instructions, and learn our destination; it was York, Upper Canada. The vessels were filled to overflowing with troops, many of whom were there "to flesh their maiden swords," and, perchance, take up their lasting abode in that section of his Britannic Majesty's provinces.

To facilitate the landing of the forces, each craft was provided with a large batteau, towed astern, which some of our tars, facetiously termed "the parlour," and to which convenience many of the men were fain to retreat from the pressure and crowd of the larger vessel. Fortunately the weather continued moderate and favorable; our run was soon accomplished, so that at night-fall on the 26th, we were nearly up with York. The commodore directed us by signal, to "close our lines," and "bring too on the larboard tack," while each commander of land and sea forces, from

the different vessels, repaired on board the flag ship, to receive final instructions, previous to the debarkation and attack. The night passed cheerlessly and heavily away; some sank on the deck, to slumber or to think; others paced to and fro, with an irregularity of step and action, typical of the feelings within; while ever and anon, the busy hum on the berth-deck, as it fitfully broke on the ear, told that there were many watchers for the coming morrow.

There was indeed one gloomy and restless spirit brooding over the fate that was too surely and speedily to be accomplished: one, too, in the very spring of life, with all the buoyancy of young and ardent aspirations, ere the boy had ripened into man! Though twenty years have passed, the impressions of that night are as yesterday; I still see the form of the youthful midshipman, bending over my cot, as he aroused me from an unquiet and dreamy slumber; I remember, too, the diffident, half-uttered apology for intrusion; the hesitancy and doubt in expressing his convictions, that he should not survive the approaching conflict, and the final request that his body might be conveyed on shore for interment. Argument and raillery were alike lost in endeavours to chase away, what I then thought, the phantoms of a diseased imagination. The conviction—the fatalism—call it what you will,—was too deeply rooted to give way; it reigned paramount and indestructible. The required promise was given, and tranquillity shot a transient gleam athwart the heart-stricken, and predestinated sailor!

The morning dawned at last, and our fleet filled away and stood in towards the beach, and anchored; and now the scene of debarkation commenced; the batteaux were filled and the ships' boats, well officered and manned, were ranged ahead to tow into action; the small vessels of the fleet were again under way, and beat up to the respective stations previously assigned, against a strong north-wester, to make a diversion in favor of the boats and scour the surrounding country. The land forces pushed fearlessly in for the landing, amid the roar of artillery and the heavy platoon firing, from the belligerents afloat and ashore, the prelude and accompaniment to the work of devastation and death.

It was at the commencement of this tremendous and deafening discharge, that a six pound ball from the enemy's battery, *ricochetted*, and, *true to its destiny*, struck the gallant and youthful fatalist, and cut him nearly in twain! With the exclamation, "O, my God!" he fell, a mangled and lifeless corpse, upon the deck.

His last request was complied with—

"On a foreign strand,
In death, an exile from his native land,"

a hammock his winding sheet, the earth his coffin, with no mound to designate the spot—no stone to attract the casual loiterer on the shore—lie all that remains of the youthful, ardent, and ill-fated Hatfield.

M*******.

Biographical sketch of Thomas Ap Catesby Jones.

The actions of naval men are at all times open to public inspection. Let them perform any thing, by which the renown of a country is advanced, and they are recompensed for such service by immediate admiration. This tendency in the public mind, makes it unnecessary to wait until the close of their lives, before we venture to record their deeds. It must be conceded, that the subject of this sketch has rendered important services to his country, and there are manifestations at present, that his country is about to do him justice. The State of Virginia has lately resolved to present him a sword, with suitable emblems and devices, a boon which he had long since fairly won at her hands.

Thomas Ap Catesby Jones was born at Hickory Hill, Westmoreland, Virginia, on the 24th of April, 1790. This part of Virginia has been the birth-place of several distinguished individuals. It has given two Presidents to the United States; one of them the founder of our government. Richard Henry Lee, who acted a conspicuous part in the first Congress, and in the Virginia debates, on the adoption of the Federal Constitution, was a native of this county. Young Jones received the rudiments of his education at Cherry Point church, Northumberland county, under the tuition of the Rev. John Seward. About the year 1800 he lost his father, and in a short time afterwards, he was deprived, by death, of his mother. In 1802 he was placed under the care of Mr. Wardrope, a teacher in Westmoreland, who was somewhat distinguished as a mathematician. After continuing at this school for two years, he was sent to the city of Richmond, and placed under the care of his uncle, Col. Meriwether Jones. Here he became a pupil of the celebrated Ogilvie, who, after teaching in several parts of Virginia, saw fit to turn Rhetorician. With this view he travelled over a large portion of the United States. Though differing with this gentleman entirely, in his religious views, this need not prevent the writer, from awarding to him the praise of polished, artificial eloquence. Nor does the writer question, that his orations against particular vices, were productive of good. He subsequently fell heir to a title in Scotland, but died on his homeward voyage, almost in sight of his earldom.

In the year 1805 the subject of this sketch received his warrant, as Midshipman in the United States Navy, during the administration of President Jefferson. Some definiteness being thus given to his pursuits, it was necessary that he should be further instructed in the science of navigation. For this purpose he was sent to the school of Mr. White, in Richmond, where he made commendable progress in that useful branch. After receiving his warrant, he might have gone, for some time at least, into the merchant service, but he preferred devoting his attention to mathematics. It may not be amiss here to enquire, what circumstance had given to

the mind of Midshipman Jones an impulse towards nautical pursuits; for an incident of the simplest kind often exercises influence over the complexion of future life. This impulse had originated some years prior to this period, from incidentally reading the voyages of Cook. This record of adventure and discovery, had filled his mind with a desire to visit distant islands, and the promise he then made to himself, to execute his purpose, has since been fully redeemed. The youthful imagination is often taken captive, even by reading voyages, which may abound in nothing but dry details, or in descriptions of the rudest objects. The enthusiast Rousseau cherished a love for savage life; and with the youth, whose desire to be a voyager is just forming into maturity, the wish is not uncommon, to see man in all the aspects he presents. In exciting such enthusiasm, the voyages of Cook and the writings of De Foe have exercised no small share of influence.

The Tripolitan war had terminated successfully, in favor of the American arms, and the officers engaged in that contest, were returning to different points of the United States. Some of them came to the city of Richmond, and were entertained at the house of the uncle with whom our young Midshipman was residing. Had there been any hesitancy in choosing a nautical life, it is probable that the emulation kindled by the attentions bestowed on these officers fixed his wavering purpose. In the month of June, 1807, the American frigate Chesapeake was wantonly attacked by the Leopard, a British armed vessel. This outrage, committed in a time of profound peace, roused the spirit of all, who felt for the honor of the American flag. Upon this event, Midshipman Jones received the orders of his government, to repair immediately to Norfolk, and report himself to Commodore Decatur. He promptly bade adieu to his friends in Richmond, and to the hills and ravines of that romantic city. In the spring of 1808 he was ordered to the New Orleans station, to be employed in the gun-boat service, on the coast of Louisiana. Our relations with Spain were at this time somewhat critical, and it was necessary that the Revenue Laws should be enforced, and a measure of vigilance exercised over the incursions of piracy. During the time he was an acting midshipman, he received a communication, that the sum of $10,000 would be freely given, provided a designated part of the coast should be left free from the inspection of his vessel. But Midshipman Jones discharged his duties to his country, unmoved by temptation. In the performance of such duties he continued, until June 1812, when a declaration of war was made by the United States against Great Britain. He was then raised by his government to the grade of Lieutenant, and put in command of a division of gun-boats, intended to operate on the eastern coast of Louisiana, and in Mobile bay. At the same time he received despatches, to sail to Vera Cruz, in Mexico, to apprise the United States brig Syren, of the declaration of war. On returning he fell in with the Syren, whilst a British vessel, carrying 34 guns, was in full chase. The British sail relinguished the Syren, and made chase for the vessel commanded by Lieutenant Jones, but

with some management on the part of its commander, the gun-boat made good its escape.

The Indian tribes, particularly the Creeks, having continued to annoy the Americans, in May, 1813, General Wilkinson moved against Mobile, a Spanish fortification. General Wilkinson and Commodore Shaw were on board gun-boat No. 156, commanded by Lieutenant Jones. This expedition was so well conducted, that the fortification immediately surrendered, which gave into our hands the occupation of Mobile bay. The American forces resolved to fortify Mobile Point, which afterwards gallantly sustained the bombardment of a part of the English fleet. For this fortification Lieutenant Jones was engaged in transporting materials from the adjacent islands, and not one vessel was lost in this service, notwithstanding the utmost vigilance of the enemy.

The coast of Louisiana, even in time of war, was in a situation most defenceless. The population of the state was made up of persons speaking several languages. Lawless men inspired consternation among orderly citizens. Pirates, after being dislodged from the West Indies, had made themselves formidable on the coast. Many of them had become entrenched in the island of Barrataria, which lies on the north side of the Gulf of Mexico, at the entrance of Barrataria bay. A successful attempt was made to destroy their houses and shipping by Col. Ross and Commodore Patterson, and the latter, in detailing the expedition, thus speaks of the services rendered by Lieutenant Jones:—"Lieutenant Jones particularly distinguished himself by boarding one of the schooners, which had been fired, and extinguishing the flame, a quantity of powder being left in her cabin, with a view to her destruction; he is, also, with Lieutenants Norris and Cunningham, entitled to my thanks, for the severe duties performed by them, in open boats, for several days and nights."

But the occupants of this island, though dispersed, were not annihilated. It is evident, from the correspondence published by Latour, in his Historical Memoir, as having taken place between their leader, Lafitte, and the British commanders, that the commanders regarded it as a favorite plan, to get the Barratarians engaged in the invasion of New Orleans. In this scheme they were eventually disappointed, for the pirates resolved to aid the people of Louisiana, in the approaching conflict. In consequence of the valor they displayed in the battle of New Orleans, a proclamation of pardon was issued soon after, by the President of the United States.

After the reduction of Pensacola, the capital of West Florida, Lieutenant Jones was still employed on the eastern coast of Louisiana. The situation of this state generally, and of New Orleans in particular, became at this time alarming to the highest degree. The British were flushed by their success in the capture of Washington, and a large armament was concentrating itself in the West-Indies, with a view to act against Louisiana, and, through Louisiana, on more extensive portions of our country. The British fleets, bearing a well appointed army, composed in part of soldiery, who

had served under Wellington in the Peninsular war, made their appearance in our waters. New Orleans was accessible by the Mississippi, and other parts of the coast were accessible through the medium of inland lakes. On the ninth of December, 1814, a fleet of ships, commanded by Admiral Cochrane, was discovered. On the discovery of the fleet in the direction of Ship Island, Lieutenant Jones, who had received orders from Commodore Patterson, saw that in going forward, he must inevitably be overwhelmed by a superior force. He had been entrusted with a detachment of five gun-boats, one tender, and a despatch boat. The number of men under his command amounted to one hundred and eighty, and the number of his guns to twenty-three. In reconnoitring the enemy he discovered that a flotilla of forty-five barges was coming to attack his boats. These barges were equipped with forty-five guns, and about 1200 men. With such disparity of force Lieutenant Jones would have been justified, on every principle of discretion, in making good his retreat to the Fort Petites Coquilles. The sternest patriotism would have cheerfully absolved him from the obligation of meeting his foe, and the genius of humanity might justly have rebuked him, at the moment he determined to resist. But with a strong current ahead, and the wind falling to a calm, he found it impossible to retreat further than Malheureux Island, in lake Borgne, which communicates with the Gulf of Mexico. Finding the hostile barges still on the advance, Lieutenant Jones determined to give them a spirited reception. He was not influenced in this course by the most distant hope of victory; but as the situation of New Orleans was so much exposed, he believed General Jackson might gain time, provided a vigorous defence was made at the threshhold. He, therefore, called around him his brave comrades, Spedden, McKeever, Ulrick, and Ferris, and acquainted them with his determination. It is needless to say, that they responded to the determination with marked enthusiasm The boats were arranged across the channel, between the island and the main land, and in this order their commanders awaited the eventful moment of attack. It was now certain that the enemy was moving, from the direction of St. Joseph's island. They came in 42 barges abreast, commanded by Captain Lockyer, and the tender of Lieutenant Jones, being detached from his boats, was immediately captured by the enemy. Captain Lockyer, however, did not find the rest of this miniature fleet so easy a prey, as the sequel will shew. The barges opened a tremendous fire on the gun-boats, which was answered by a fire more tremendous and destructive. The exertions of Lieutenant Jones, and the efforts of his brave officers and men, were in proportion to the unequal forces with which they had to contend. Twice the flag vessel, in advance of the rest, was boarded by the enemy, and each time the boarders were signally repulsed, together with the destruction of their barges. In Latour's map of the action, the gun-boat 156 appears to have sustained the concentrated fire of fifteen of the enemy's barges. But after gallantly resisting the attack for the space

of one hour and fifty minutes, Lieutenant Jones received a musket ball in his left shoulder. He continued to give his orders until a faintness coming over him, he was taken to the berth-deck. His gun-boat shortly after fell into the hands of the enemy, and her guns were turned on the remaining boats, all of which were successively captured, but not until after a daring and desperate resistance, on the part of their intrepid commanders. Thus terminated one of the most brilliant affairs, during the last war, with the credit all on the side of the captured. From the official report it would appear, that on board the gun-boats there were about forty-one killed and wounded, whilst the killed and wounded of the enemy amounted to three hundred. The Court of Enquiry that sat on the loss of Lieutenant Jones' command, examined into all the facts, with the greatest minuteness, and they speak of the action as having added another wreath to the naval glory of our country. We must here do justice to the bravery of the British commander, who received several wounds in the action; but we cannot say as much for his ingenuousness as for his bravery. No one can read his official report to Admiral Cochrane, without detecting a suppression of important facts, and a desire to place his enemy on stronger grounds of defence than he possessed. Nor can we speak highly of the treatment which the American prisoners received on board the British fleet.

Lieutenant Jones suffered acutely from his wound, but the enemy bestowed no sympathy on his sufferings. After he was exchanged, however, the attentions of Commodore and Mrs. Patterson awakened his profound gratitude. At the time these events were taking place, our negotiations at Ghent were in a favorable train, and shortly after the battle of New Orleans, tidings of peace arrived in the United States. Lieutenant Jones had recovered partially of his wound, but his constitution being worn down, by protracted service in the climate of Louisiana, he was ordered to Washington, and from thence he retired to his farm, in Fairfax county, Virginia. But in 1816, he was ordered to the Mediterranean, where for two years he acted alternately as first Lieutenant of the Constellation, and of the frigate United States. No station could be more pleasing to an ingenuous young officer than a station in the Mediterranean, a sea, all the shores and islands of which are redolent in classic and even sacred recollections. There are the bays on which ancient navies contended, cities in which lowly philosophy baffled the pride of the warrior, and islands which have given birth to illustrious kings. There are the halls of wisdom, the tombs of poets, and even the caves of prophets. During his stay on this station Lieutenant Jones accumulated much important information, and enriched his mind by accurate research. He made, at the same time, the most strenuous exertions to promote temperance among all subordinate to his command. That mariners are benefitted by the use of that, which reduces man to the condition of the brute, is a dangerous delusion, and this delusion ere long will be swept away in the march of reform.

It is to be lamented that any altercation should ever arise among the officers of our gallant navy. But whilst on the Mediterranean station, the oldest Lieutenants took exception to some part of the conduct of the superior officers, which drew from the younger officers a spirited memorial, addressed to the Senate of the United States. The difficulty was adjusted, however, without the necessity of action on the part of that body. In 1818 Lieutenant Jones returned to Washington. He had now by difficult services, earned promotion from his country, and in 1820 he was appointed Master Commandant; and in 1821 Inspector of Ordnance, in consequence of large contracts for ordnance, entered into by government. In 1823 he was married to Miss Mary W. Carter, of Salona, Fairfax, Virginia, in all respects a meritorious lady. In 1825 he was called on to perform the most trying duty of his life; trying, because its performance involved the relinquishment, for a long season, of those rural employments, and domestic pleasures, into which he had entered. But at the call of his country he cheerfully exchanged the pruning knife, and the sylvan hatchet, for the helm of his ship. Having been appointed to the command of the Peacock, on the 30th of May, 1826, he sailed from Calloa, in Peru, on a cruise among the various islands of the Pacific. In this cruise he visited the Gallipagos, the Society, Marquesas, and Sandwich groups. On some of these islands, Heaven has lavished its bounties, covering the tops of their mountains with luxuriant herbage, and stocking their vales with tropical fruits; whilst birds of beautiful dyes sing in their bread-fruit and cocoa-nut groves. In the midst of such gifts, the islanders were notoriously vile. But christian benevolence, operating both in England and in this country, determined to plant the Christian Religion in those islands. As many voyagers and travellers are in the habit of reviling missionary settlements, it is important on this subject, to get the testimony of unprejudiced men. Even in 1827, when Captain Jones was at the Sandwich group, there were foreigners ardent and impassioned in the cause of licentiousness. The lives of peaceful missionaries were threatened, and their humble property endangered. For some time the commander of the Peacock refrained from expressing his opinion on the subject matter which agitated the islands. But eventually he did express his views, and those views are entirely satisfactory to the supporters of Missions. From this statement it is clear, that the labors of the Sandwich Missionaries are beneficial and successful. The Mission house is the abode of peace, and the central point of attraction to the islanders. The hum of the schoolroom supplants the stillness of savage indolence, and the silence of the Sabbath is broken by pious hymns from multitudes that throng the thatched temple. Hours, once employed by the natives in disfiguring and tattooing their bodies, are sacred to devotion. Idolatry disappears before the light of Missions, and altars once smoking with infant blood, are indignantly rolled into the sea. The writer has frequently conversed with two native youths brought to this country by Captain Jones, as to the good done by Missionaries in the islands.

Captain Jones having ended his cruise in the Pacific, returned to the United States, and in 1828 was designated to command in an expedition, intended to explore in the direction of the South Pole. His appointment, by Secretary Southard, was received with general approbation. But the Senate of the United States saw fit to put an end to this contemplated expedition. The public disappointment was great, and Captain Jones lost an opportunity of placing his name by the side of those intrepid navigators Weddell, Parry, and Ross. In 1829 the subject of this sketch was advanced to the rank of Post Captain, and in June of the same year he was re-appointed Inspector of Ordnance. Since this time he has resided at Sharon, in Fairfax, Virginia, a rural spot, to which he is much attached, and to the embellishment of which he devotes those moments of recreation, which can be spared from public service. To this outline of incidents in the life of Captain Jones, it is not my intention to add a sketch of his character. It is fondly hoped that even in times of peace, services may yet be performed by him, which shall tend to place his character in still higher relief before his country, and should his country ever find it necessary to deliver again into his hands the purple decree of war, he will shew himself prompt to execute it.

One or two reflections will close this memoir. The nautical life is well calculated to awaken reverence for our Maker. His majesty is seen in the ocean. How profound the wisdom that conceived its plan, and how rich the mind that endowed it with such lavish wealth. When smoothed by his hand, it becomes the mirror of his benignity. When ruffled by his frown, it is the image of his indignation. And yet the magnificent ocean is but a small part of the Creator's works—a speck, a dot, that marks off one of his sublime thoughts, in the complicated volume of nature. Devotion will ever adorn the character of the mariner. Columbus and his comrades sung hymns on the evening of that night in which the secrets of a new world stood disclosed. His Maker kept the fire of hope burning in his breast, and supplied the capacious urn with incense mellowed in the light of his own wisdom. His hand curled, before the eye of his servant, the purple and orange pillar of cloud, which so often cheered his sight in unknown seas, and which eventually paused over the isles of the west. The same piety which sustained the Great Discoverer, will sustain all who cherish kindred emotions. The nautical profession is in all respects honorable. Our young naval officers have it in their power to communicate large instruction to their fellow men. For this reason we rejoice in the establishment of a Naval Magazine. All professional men are supplied with sources of information, directed to their appropriate pursuits. There are even distinct journals, for insulated branches of science. Under these circumstances, we cannot but hope that a publication of this kind will bring our naval men better acquainted with each other—that it will become a storehouse of much useful information, and that our young officers will deposit within its pages, all curious and striking facts which

may meet their view. Even lettered men have bestowed great attention on naval character. Appollonius Rhodius has recorded the incidents of an ancient nautical expedition. Camoens accompanied Vasco De Gama around the Cape of Good Hope. Sir Joseph Banks was the associate of Cook in his voyage round the world, who, led by the love of science, filled his basket with the flowers and plants and foliage of the Pacific Islands. Falconer has celebrated the boisterous ocean, and sung in pensive strains the perils of shipwreck. The pen of Johnson was employed on the life of Blake, and that of Southey on the life of Nelson; and it is not among the least of the literary labors of Irving, that the lives of several of our naval heroes have passed in review before his graceful genius. Last, but not least, Coleridge, among the quiet lakes of Westmoreland, and on the lawns of Grassmere, has given us "the Rime of the Ancient Mariner," by far the most ingenious and splendid poem of the present century.

CLERICUS.

OBITUARY NOTICE OF LIEUTENANT JOSEPH RITNER.

FROM THE WASHINGTON, PA. REPORTER.

Examples of living worth are entitled to special respect. In themselves worthy of admiration, they rebuke our follies, and allure us to virtue by a mild yet commanding authority. Their influence is always felt, and association with them seldom fails to operate a happy effect.

But these propitious effects are not confined within the narrow boundaries of "this life which passeth as a shadow;" "the righteous shall be in everlasting remembrance;" "though dead, they yet speak;" and survivors are edified and comforted by the melancholy remembrance of what they once were. To record their virtues is a tribute which friendship and justice owe to their memory, and a due regard to the interest of society, requires that the memorial be preserved, and presented distinctly before those who still live, to awaken their generous emulation, and allure them, also, to choose the path which leads to distinguished eminence.

Such reasons demand some special notice of Lieut. RITNER, who has lately ceased to be a sojourner here below. The eldest son of Joseph Ritner, Esq., of Buffalo township, Washington county, he was born April 26th, 1807, and died February 18th, 1834. His stay on earth was comparatively short, but associated with circumstances of unusual interest:—like to a benignant luminary, whose

rising shed bright rays of promise, whose progress was marked by increasing splendors, and whose early setting was in a cloud of serene and brilliant glory. His youthful mind soon evinced its upward march. Not contented with the ordinary cares of humble and laborious life, his enraptured vision descried the distant glories of the hill of science, and with dauntless purpose he determined to ascend its heights, explore its beauties, breathe its fragrant air, and enjoy its widely extended prospects. He had not mistaken his destination. Genius hailed him as her son, and bade him proceed. Talents had been bestowed which, in order to distinguished achievements, needed only discipline and a favorable scene of operation. To this, at first, very considerable impediments stood opposed. By his adventurous spirit they were regarded, not as reasons of dismay, but of patient and determined effort. Hope cheered his labors, and perseverance accomplished the object of his fond desire. He was admitted, June 1826, as a cadet into the Military Academy at West Point.

The system of education there was eminently adapted to the constitution of his mind. With science refined, arduous, and widely extended, was united the cultivation of martial talent. The milder graces of polished literature were associated with a discipline, which called into exercise the sterner attributes of character, and imparted the accomplishments which befit him who is to sustain, amidst the perils of war, the rights and honor of his country. The accumulation of knowledge was not his only object; but knowledge which might be devoted to important practical purposes. He sought to combine, in one, the learned and useful man: the scholar, and the efficient citizen. The design was worthy of his talents: and talents and industry won the prize for which he sought. His promotion during the first year gave a pledge of a successful result; and those anticipations were well sustained in the succeeding years of his disciplinary course. But then his patience and constancy were again to be tried. When prepared to graduate with great distinction, a hemorrhage, the precursor of fatal disease, prevented his examination. His title to the deserved honor, however, was not a matter of doubtful trial. His meritorious claim had been well ascertained, and was readily admitted. He was passed with appropriate testimonials of approbation and honor, entered the army in 1830, and was immediately assigned to a highly important and responsible command in the South.

In 1831 he was recalled to the North, and entrusted with an important office in the Military Academy. Its duties required not only a competency of scientific acquisition, but decision, prudence, and conciliating manners. By the exercise of all these he acquitted himself with much honor and acceptance.

An occasion soon arrived which required his active services in a military expedition to our western frontier. The Sac, Fox, and other Indian tribes, in 1832, had assumed a hostile attitude, and were perpetrating acts of violence, and spreading dismay among the defenceless inhabitants. Such movements demanded prompt,

and efficient control. The unhappy Indians had adopted measures which merited severe retribution; but their degraded character, and the mad delusion by which they were impelled, claimed all the forbearance and mercy which were consistent with the peace and safety of our frontier settlements, and the reduction of those desperate assailants to submission and good order. In this service Lieutenant Ritner was required to act in a special command with which he was entrusted; his conduct, as might have been expected, was distinguished both by courage and humanity.

He had repaired to the west under a special order from the commander in chief, and arrived at Prairie du Chien on the 25th of July. He was immediately stationed at the mouth of the Ouisconsin with a piece of cannon, to intercept Black Hawk, should he attempt to escape by that way. His post was attacked by the Indians in the night between the 28th and 29th of July; but the assailants were repulsed without loss on the part of the whites. The Indians lost near twenty men, and several canoes were sunk. This fact was afterwards ascertained from prisoners. On the day previous, eight canoes had been taken. In these were many women and children, much emaciated by hunger. Instead of neglect or abandonment they were treated with kindness, and sent to Fort Crawford. When it was known that Black Hawk designed to make his escape in another direction, Lieutenant Ritner went, immediately, on board of a steamboat, and arrived in time to participate in the action of the 2d of August. The nature of his command denied him an opportunity of engaging in the actual conflict, and he might have honorably declined the danger; but his martial ardor disdained this condition. Having obtained permission to go, he volunteered as a private soldier and plunged into the thickest of the fight. His merit and courage in the whole campaign were duly recognised, and received the special commendations of General Atkinson.

When hostilities had terminated, he retired with the army to Rock Island. Having escaped the dangers of battle, he was called to witness scenes of distress not less appalling and fatal than those of savage warfare. The troops were visited by cholera. In those trying circumstances he displayed his usual magnanimity, his sympathy with the suffering, and his disposition to extend all possible alleviation and relief, until he himself was attacked by that malignant disease. The attack, though severe, was not fatal: but he repeatedly said that the fatigue and exposure of a wilderness campaign, together with the attack of cholera, had undermined and made an irreparable breach in his constitution. Soon after the termination of the Indian war, he was recalled to his post at West Point by the special request of Colonel Thayer, superintendent of that institution, where, by a rare combination of gentleness and firmness, he secured the affection, whilst he maintained the respect of those under his command.

Early in 1833 he received the unexpected and highly flattering compliment of an appointment in the dragoons. For peculiar rea-

sons he declined the appointment. About the same time, by a unanimous vote of the trustees of Washington College, he was elected Professor of Civil and Topographical Engineering, accepted the appointment, and entered upon the duties of his office in May, 1833. His character and talents had excited large expectations of his distinguished usefulness in his new profession; and a favorable, but alas! short experiment, promised the accomplishment of those interesting anticipations. But such was not the will of heaven. A return of his hemorrhage compelled him to retire, and soon after to resign; an event deeply afflictive to every member of the institution, whose esteem, confidence, and affection he had won. Their sympathies followed him, nor left him until they were absorbed in the sorrows awakened by the melancholy intelligence of his death. In testimony of their high respect for his worth, and their painful sense of this mysterious providence, the "Faculty of Washington College," and subsequently the students, resolved to wear crape for thirty days.

Having removed to his father's residence, a few miles distant from Washington, he had, for some time, in contemplation to occupy a station assigned him in Fort Mitchell, in Alabama, but the uncontrollable progress of disease, in a few months, terminated his earthly prospects and employments. His epitaph might be written in the words of his afflicted father a few days before his decease: "From the time my poor boy knew his right hand from his left, he never wilfully offended his mother or myself." What he was in the domestic circle, such was he in all the more extended scenes of life in which he was called to act. Possessing a quick and delicate sensibility himself, he sacredly regarded the feelings of others. To a bravery never questioned, and a chivalrous sense of honor, he united a suavity of deportment which never failed to secure the warm regard of those with whom he was associated. A little incident will illustrate this fact;—his brother officers, by common consent, in playful affection, accorded to him the title of Chevalier Bayard. That his name, who was characterised as "*sans peur, et sans reproche,*" should be thus appropriated, says more than pages of eulogy. His mind was stored with classic lore, his heart the seat of every generous affection. Cautious in his friendships, he was unfaltering in his attachments. He lived and died with his bright name unsullied. His death, as it occurred, had, with him, been a matter of deliberate anticipation. He awaited its approach with cheerful resignation, and in the assured hope of a blissful immortality. It was the hope which is presented by the gospel of Christ, "eternal life the gift of God through our Lord Jesus Christ." He was a philosopher of no ordinary rank, but in its theories and dreams he sought not his last refuge, but in Jesus Christ the "resurrection and the life." On February 20th, 1834, his mortal remains were consigned to the earth in the family burying ground.

'Tis true, his was no soldier's burial: the muffled drum, the "piercing fife," and "all the pomp and circumstance of war,"

were wanting. But what was far more soothing to the sorrowing hearts of his family, was there—a long train of friends, whose swelling bosoms and gushing eyes, (for many a manly eye was wet,) showed how deeply they felt the common loss.

To each ingenuous youth his noble example says, "Go thou and do likewise."

ARTHUR TREMAINE.

"The follies of youth afford food for repentance."

"Sound sleep by night, study and ease
——together mixed;"
——"sweet recreation
——which most doth please,
With *dissipation*."—*Travesty.*

Time passed. The first Monday in June arrived, and the examination was commenced. Few were the forms that were now seen sauntering on the banks of the Hudson. Few were the loiterers around the barrack doors, or on the stoops.* Silence reigned. Long after the "taps" had sounded to bed, and the "inspector" had made his investigations and his report, the dim flickering of a lamp might be discerned through the temporary curtains, which *fear* had hung before the windows. *Fear*—the fear of not being fully prepared to pass, successfully, through the ordeal of the examination; and the fear of being *reported* for transgressing the rules of discipline. Oh, how much was learned in these stolen nocturnal studies. The whole energies of the mind were then concentrated, and what, in the ordinary routine of daily pursuits, was dimly comprehended, now became familiar and congenial. There is nothing like the prospect of immediate examination, so well calculated to induce mental activity, or to urge to mental exertion. The blackboard never wears so terrific an aspect as when before the assembled examiners; nor so gloomy a complexion, as when the cadet is conscious of ignorance.

We poor plebes had, during this exciting and absorbing period, a respite from the persecutions of our unmerciful seniors. Men are never so regardless of their fellow men as when engrossed by selfishness; nor so full of human kindness as when they have need of sympathy or assistance. Cadets are never less idly mischievous than when absorbed by study; nor more well-disposed and respectful towards the plebes, than when they are apprehensive of being "*found deficient.*"

---

* Properly *Stoep*—a Dutch balcony.

A cherished, though false, notion of superiority, sometimes engenders contempt; but the vain-glory of adventitious dignity, invites the exercise of a patronising regard. Power is so gratifying to our pride, and so agreeable to our nature, that we eagerly embrace it, even in our earliest youth. The fag of Eton, and the plebe of West Point, are equally the subjects of its exertion.

He who asserts that all are born equal, utters a splendid falsehood. He who rails at personal aristocracy, rails at nature; and he who anticipates in social life, reciprocal influence and uniform elevation, founds his hopes on false principles, and transforms the spirit of humanity into utopian fantasms.

The distinction that obtains in all our universities, between the senior and the junior, is but the type of that which exists in civil society. In military communities it is essentially the soul of discipline, and enforces the necessity of subordination.

All innovation of the established rules of natural dependency, is, therefore, injudicious and unwise. The "plebe" will ever be a "plebe," and the "caitif," and the "high private," and the "special" will ever be his domineering superiors; and they, in their turn must yield to the "instructors;" who, again, cannot securely presume to be exempt from obedience to the "superintendent." The cadet who seeks to revolutionise this wholesome relation, will find it hard to kick against the pricks, and may surely rely on "being reported" for his arrogance.

I did not arrive at these comfortable truths until I had passed my noviciate, and was fully authorized to exert the power which they sanction. It is most consoling to him who enjoys and exercises power, to reflect that he was once one of the governed. It seems but the paying back a debt, or the cancelling an obligation originally imposed on us by our predecessors, when we concoct a joke, or indulge a laugh at the expense of our successors; and this accounts for the absence of all remorse for tricks, however extravagant, or injustice, however glaring.

My unlucky connexion with Snickings had enabled me to observe, and to be at times the subject of, the most preposterous impositions. This liability would have longer continued, had not a cadet, whom I had become acquainted with, taken me under his peculiar charge and protection. Either the fact of my father's being one of the board of visiters, and therefore, as it was once thought, endowed with factitious influence; or else, (as I am rather inclined to believe,) because I was a handsome, comely, and agreeable lad, induced this cadet to consider me his "*pet*," and to become my *patron*. I was to pay him the fealty of *affection*, and he was to impart to me, the wisdom of *advice*. Affection was a very comprehensive term. It included in its obligations many odd tours of guard duty—bringing pails of water, when my patron was "orderly of the room," and other police duties, which were highly unbecoming the dignity of an "old cadet." These co-adjutant duties it is, however, anticipating to mention; and I only refer to them, in passing, as the general concomitants of *patronage*.

Though there was no specific bargain made, nor a full understanding of our mutual relation, yet "the custom of war, in like cases," was a maxim of imperious authority, which it would be unheard-of assumption to question.

It is a matter of retrospective satisfaction, that the influence which my patron eventually acquired over me was conducive to a proper obedience to the established laws, and counteracted the baneful maxims which Kader, and a few others of his boasting and reckless junto, endeavored to induce me to adopt.

We are told by a poet almost inspired, that it is a favorite and congenial employment of condemned spirits, to roam abroad to infuse the poison of factious contempt into minds hitherto honest in their allegiance; and who rejoice, with demoniac triumph, when their treacherous insinuations have caused a lapse from the integrity of virtue; as we see, in the natural world, a parasitic plant drawing from the noble tree which it entwines, the life-sap that invigorates; or extending its lateral tendrils to a neighboring pile, into which it insinuates itself, and which it silently overthrows.

In every community we find confirmation of the poet's doctrine. We discern pleasures, alluring as destructive—vices attractive as fatal, which seduce the thoughts, and control the actions: and men so lost to respectability, and so degraded from their own self-respect, who seek only to reduce others to their own degradation, and who rejoice only in the fellowship of infamy.

Elevated as was the standard of honor, and delicate as were the perceptions of duty, among the mass of cadets, the corps was not free from *thoughtless* individuals, who yielded to the maxims of *false spirit;* nor from *depraved* individuals, who instilled the sophistry of *personal independence*, and whose example indicated an obtuseness of moral principle. Although most of this class met with the punishment of dismissal, or were found deficient in their academic studies in the first year, yet there were others with just cunning enough to escape detection, and just intellect sufficient to drag along with their class and to scrape through an examination, who remained at the academy for several years.

One of such was Kader. He had been "turned back" once, and had now reached the termination of his fourth year with the assurance of being sent off, for a second deficiency.

His long residence at the academy, had given him a factitious dignity and influence, and the office which he held among "*the twelve*" dissipated compeers, (which was to enlist recruits for their club that the present *examination* was likely to dissolve,) made him a companion dangerous both to the morals and the hopes of the aspiring and ambitious plebe.

As most of his notoriety was derived from the club of the exclusive "twelve," he was especially desirous to perpetuate a body, where he would be remembered with respect, and where his sayings would be honored by tradition. After his communion with me at the soda shop, he was very attentive to Joe Doane and myself, and flattered us by the high consideration which he seemed

to hold of our merit, and the pleasure he seemed to derive from our society.

Not a day passed that he did not visit us; for, as I have observed, he was certain of being "found deficient," and entirely reckless of the consequences. Having made up his mind to "'fess," he did not attempt to regain by study what he had lost by repeated negligence. He therefore found the plebes not only the most fit subjects for his recruiting purpose, but the most willing to receive his visits, and the most gratified by his attentions.

He was quite fascinating to Doane and myself, though Snickings was often interrupted in his ponderings over impossible equations, or perplexed in his French phrases, by the relation of "glorious times" at Cronque's, and by hair-breadth escapes from Zeb.

Thus I was under the power, at my initiation to the academic employments, of two influences. The one was, the sense of duty to my parents and of my obligations to military obedience—the other was, Kader's persuasions to disregard both. Whenever I referred to the "rules and regulations," he talked of "*tyranny* and the *spirit of independence;*" and when I spoke of duty, or the hopes of attaining a high standing, he laughed at the obsolete and gothic notions; railed at the partiality of professors; and contemned the honor of academic excellence.

Doane was already sufficiently inoculated with the disease of these prejudices by his quondam associate, whom he often quoted in confirmation of Kader's assertions. In a very short time, even during the first week of the examination, my ambition began to subside, and my honorable aspirations to sink into the character of morbid fancies, and senseless chimeras. The disappointment in my preconceived ideas of the grandeur of the buildings, and of the immensity of the *wall* which bounds the legitimate walks of the cadet, furnished to my mind a plausible argument for the truth of Kader's stories of injustice and partiality. I began to think it would be a merit to oppose the turpitude of my superiors, and to violate the laws. As fancy had cozened me in one instance, I did not doubt it was false in another. The desire of being one of the corps of cadets, for the honor of scientific distinction, gave place to the ambition of becoming one of the vindicators of their rights and *liberties;* which, according to the philosophy of Kader, was to be accomplished by transgressing the rules by which they were restrained.

Such were the fallacies that Kader instilled, and which his associates encouraged and cherished. It is not to be wondered, therefore, ignorant as I then was of his real character, and ready as I was to receive every thing *on trust*, that I yielded to his invitation to join "the twelve" in their hebdomedal carousal.

When the Saturday ensuing had arrived, I was told by Joe Doane that a number of the plebes, whom the junto had selected to share the honor of their association, were to meet at a certain spot behind Fort Put, and from thence to be escorted to that haven of hope, the hopeful Benny Haven's.

At the appointed place of meeting I found myself, in due time. Several of my classmates were there with old cadets, disguised in all manner of costumes. Some had false whiskers, and others wore wigs of flax or horse-hair. Many were dressed as citizens, and with false noses. While I was wondering at the singular metamorphosis of my companions, I saw a figure emerge from behind a large rock arrayed as a woodsman of the mountains. On his shoulder he bore an axe, and in his hand a basket. He came directly up to me, and looking at me from head to foot, surveyed my costume, and glanced at my countenance.

"You look firm," said he, "but you must not wear that dress, or that hat—your *feet!* they will never suspect to belong to a christian—so follow me, Tremaine."

He then led the way towards the rock, and opening from behind it, a curtain of evergreens, pointed within, for me to enter.

"Wait an instant," said he, "till I find Doane."

I was thus left alone in an apartment, partly natural, and partly enclosed by artificial means. The rock alluded to formed one entire side, and by a peculiar bending, the part of another. About two feet from the rock, there grew a large tree; and near it, also, grew several clumps of cedars, whose tops spread out, like an umbrella, and formed a compact mass, which, by a few helps from ingenuity, could be rendered perfectly impervious to the rain. Between the rock and the tree, was the entrance. On the opposite side, more care had been bestowed, to form the wall of the apartment—stakes were driven in the ground, and interwoven by grape-vines, so as to be staunch and firm; and on the outer side, cedar bushes were placed, and the neighboring vines were trained, making the whole exterior to appear as the continuation of the rock itself. The other sides of the apartment were formed in a similar manner, and with considerable skill; so that without a minute inspection, the existence of such a room in the centre of the forest, would never be discovered.

The top was formed, in part, by the cedars, and by an old tree, which had been felled from above, and made to lie across the rocks. Light was admitted in a very ingenious manner, from between the limbs of this tree. The aperture was arranged so as not to be liable to admit the rain, or to impair the dryness of the interior. A rude fire-place, in which were the remains of a former fire; an old spoon, and the part of an iron kettle, adorned one corner. Here was partially open a trap-door, under which I saw the faint gleams of tin cups and gridirons, and some of the paraphernalia of original housewifery thrown in disorder, unwashed and unlicked. This was, I presume, the kitchen cabinet. Another door afforded entrance to the secrets of less carnal association. Empty bottles,—the visible sign of a *spiritual* grace—showed that my philosophic companions were aware of the facility of removing vexatious or refractory thoughts, by introducing to Reason an agent which plays the d—l with the Court of the Faculties—putting Conscientiousness and Firmness by the ears: arraying Imitation and Ideality

against Cautiousness and Adhesiveness; allying Secretiveness, Combativeness, and Destructiveness, in a league against Acquisitiveness, Calculation, Order; and arousing to activity Marvellousness and Comparison, but overpowering Hope. Seats were arranged around the walls, and festoons of evergreens adorned the interior. Shells, containing paints of different colours, and a broken mirror, rested on a rude shelf. Two or three coats were hanging on pegs, and several old hats hung sociably by their side.

I had scarcely made a survey of this singular cabin, when the curtain was thrown aside, and Doane and my conductor, the woodman, entered.

"Doane," said the latter, "you are d—d slick in these matters I know, therefore you may arrange your disguise as you please; but as for you, Tremaine, I must take you in hand myself—here, slip these pants on, and doff your beaver for this shako—there, that will do—you become this dress well. Now tuck up the tails of your coat, and immerse yourself in this roundabout.

He then pulled from a large crevice which I had not before observed, an old uniform coat, without buttons or skirts, which I pulled over my dress.

"Now you are loaded, let's prime, and then you'll be ready to go off," continued my master of the toilette,—"one streak of black on the eye-brows—there now, you may beg of your father and he would not suspect you—Look!"

I did look, and doubted my own identity. The dissolved gunpowder which formed the pigment for my eye-brows, changed entirely the expression of my countenance. The shako which graced my head, the mutilated cadet's coat which covered my body, and the tattered breeches which adorned my nether members, disguised me completely, like one of those wild boys of the neighborhood, who live by selling apples for old clothes, and by introducing contraband luxuries to the cadets, and who are seen skulking about in their cast-off garments. I might have been mistaken for the lineal heir of the woodman, my metamorphoser.

Doane was not, I thought, equally successful in the harmony of his disguise, but he was, however, pronounced, by our excellent judge in these matters, "an ornament to the jolly roysters, and dressed as slick as grease."

Thus equipped, we emerged from our sylvan boudoir. Our companions had disappeared by degrees, leaving only an old cadet and two plebes on the ground. They started immediately on our appearance, and, in a few minutes, we followed in another road.

On our way, we met one of the officers, whom we passed without suspicion.

"I say, Kader," said Doane, "who was that?"

"Mum," said our guide, "my name is no longer Kader, but Job Johnson—call me Job, or *Grubb*, as you please, and I will answer. And you, Doane, must be nicked to-day—and, Tremaine, you shall be named *Pedes*, in honor of your understandings."

"Well, as you choose," said Doane; "but tell me, Grubb, do you always disguise yourself in this manner?"

"No," replied Grubb, "only on special days. This is our annual meeting, when Benny quits tick, and calls on us for rhino; and to save him the trouble of individual duns, we clap on these borrowed outsides to puzzle squire Nab'em, and to dumbfounder Zeb or Hitch, should they venture to cross our track.

I was mightily pleased with our masquerade, and elated by the spirit of adventure. Kader amused us with stories of former meetings, and with anecdotes of former members, who had met the fate which threatened most of the club then: that is, of being suddenly attacked with a "*June fever.*"

In a short time we arrived at Buttermilk Falls, and we soon found ourselves at the infamous "Benny's."

Our companions had bespoken our entertainment, and a strapping wench was making a compound, which I afterwards heard called "apple toddy." This was a "*whetter*" of most potent energy, which we were all obliged to taste. The room where we were, overlooked the Hudson. A balcony, or stoop, projected from the house, from which several miles of this noble river could be seen. The sails of the sloops which rested on its tranquil bosom, flapped idly against the rigging, as if impatient for the breeze to kiss them. Sometimes the faint notes of the voyager would be heard, and I never shall forget the melody of a distant bugle, which some musical boatman was blowing to beguile the lazy hours.

On the opposite shore, the house where Washington resided, and the farm where tory Robinson plotted his country's ruin, was pointed out. Towering hills, and valleys waving with verdure, gave a grandeur and beauty to this view, and its patriotic associations, together with the apple toddy, inspired me quite.

I was summoned from the balcony to attend my companions. I found some seated around the room, and others in groups, standing in silence to hear a speech from the "Grand Sachem of the Twelve Jolly Roysters."

This high functionary was arrayed in brimstone coloured inexpressibles, and a scarlet jacket, ornamented with flames, and imps, and pitchforks. His nose was of that shape called "bottle;" of a rich carnation color, but mottled with streaks of violet, like a Hardenburg pippin. Carbuncular piles adorned its extremity, as on a blue-nose potato, giving to the organ an expression of ineffable satisfaction, and indueing the whole countenance with singular complacency, and contempt for future care.

This whimsical dress was capped by a full three-cornered chapeau, from which protruded three false segars with phosphoric *termini*. This was "*The Devil.*"

The spirits of all were considerably elated by the toddy, and the conflict of mock gravity, and a strong desire to be uproarious, gave their faces a most ludicrous expression, which the various dresses, and assumed characters, served to heighten.

I was obliged to stuff my mouth with my handkerchief, to preserve the requisite demureness. Amid all the strugglings of facial muscles, the Devil's retained the most imperturbable quietude.—He seemed, however, to enjoy the scene, and, like Natty Bumpo, laughed '*interiorly.*' His frown, at the convulsive escape of confined merriment, was terrifico-comico, and created a desire for laughter, stronger as it was oftener reproved.

At length perfect silence was obtained, and the Sachem gave the tribe a talk. I have now forgotten the precise style of his language, but it was peculiarly ridiculous. I have forgotten, also, how he explained the origin, use, and end of the club; but he *did expatiate* on these points to our perfect satisfaction, and proved that the honor of being 'one of the twelve,' surpassed, infinitely, the dignity of being 'one of the five,' and that the only *spirited*, legitimate, or reasonable object of going to West Point, was to enjoy a *spree.* He proved as clear as day-light, that pleasures and frolics, such as the present, were sweeter and more precious, from the *danger* of their enjoyment; and demonstrated that an escape from Haughty or Zeb was most glorious fun. In conclusion, he stated that the admittance fee, which he called the "pone primus," was —"left to our own honor." This was a damper to some of the plebes whose pockets were not remarkably heavy, and who saw no escape from the dilemma in which they were so artfully brought. It was indeed a sad misfortune, to be attacked thus, as Gil Blas says, on our weak side. The appeal was, however, too emphatic to resist, and every plebe "down with his dust."

Unfortunately, I had only the two ten-dollar notes, that my mother sent me. I had no sooner shown them, than friends suddenly started up, like the fabled Hydra's heads, and grew wondrous affectionate in an incredible short space of time.

They unanimously agreed, that my *pone primus* should be one of the notes; and the other they most magnanimously determined should be distributed among the company, *pro bono publico.* Luckily Kader came to my assistance, and relieved me from my embarrassment. He said "there were several good reasons why *Pedes* should keep the X: imprimis, the note was his own. Secondly: it could not be divided among so many. And lastly: (taking the note himself) he who asks for it, *shan't have it;* and he who don't ask—don't want it—" a most conclusive argument.

We were now called to *supper.* I only remember of this supper, that a fiery compound of drugs, called *wine,* was very soon called for, and strange mixtures of stronger liquors were freely served. Some of the poor plebes became quickly *fou,* but the *members* of the club were astonishingly staunch. A grand song, "composed expressly for this occasion," was sung with great glee and vociferousness. All I remember of it is, that "Jolly Roysters," rhymed with "Jersey oysters," and that this was the chorus,

So d—n the professors,
And all their successors—
But brave boys come let us
Pass briskly the bowl.

Joe Doane acquitted himself exceedingly well and elicited the applause of authentic judges. He was a great character in the club afterwards. The Devil complimented him very highly; and the Devil certainly knew how to appreciate merit.

The poet-laureate of the Jolly Roysters, had now become very merry.

"Mister—no, *most reverend* Devil," said he, "who presides with so much dig- (hic) dignity over this honorable club; I now rise with fear and (hic) trembling, to address you—my feeble muse on pinions weak ascends (hic) up into my brain and flutters there—

'Canto quæ solitus, si quando armenta vocabat,'

which, being interpreted, means, (hic) I've got some devilish clever verses for the 'furlough men.'"

"Where are they—where are they?" sounded on every side.

"(Hic)—hæc, hoc," stumbled out of the laureate's mouth.

"Read them up, Dad—let's have them."

"Silence" cried every body, "what the deuce do ye make so much noise for"—

"I say, Grubb, pass that bottle this way—fill up for the poet!" said some one. "Fill up," reiterated the company.

Most of the party were becoming capitally drunk, but at length, with partial silence, the poet began.

FURLOUGH SONG.

Air—"I'm not a lover now."

Lady! no cap is on my head,
No visor o'er my brow — —

"Stop, Dad," interrupted one of our almost dementate company, called Bold Thompson, "Stop, Dad! who the devil are you talking to—there are no ladies here,—are there Grubb?—I wish there were. I move an amendment"—

"Silence!" commanded the Sachem—"go on, Dad."

"Silence," repeated the assembly, glad for any excuse to talk, therefore they were vociferous—for the song.

"I say Kader," shouted Bold, "Grubb Johnson—don't you wish somebody would *insult* you? I feel all over aquafortis—hurrah for old Kentuck! Housier, Housier, that's my watchword on the Massasippi—"

"Bold Thompson, you will be voted '*under the table*,' if you don't keep quiet," said the Devil, solemnly.

This was a sentence of most fearful import among the jolly roysters, and only resorted to when all persuasion had failed.

Bold was soon quieted, but his spirits seemed to ooze from his feet, which he employed, ever and anon, in kicking the table, and overturning the glasses, and demolishing the crockery, while the poet recommenced.

"Mr. Devil, (hic) I can't 'spect *all* will understand my poem, or be agreed on the beauty of my song, (hic)

'Multa mî convivæ prope dissentire videntia;
Poscentur vario multa diversa palato,'

as Horace says; but as I think (hic) it will please those who have been so unfortunate as to pass three screws, I will go on and enter- (hic) -tain you,

'Possunt quia posse videntur,'

as Vir- (hic) -gil says—as for the amendment of the ladies, I think they *can't be* amended."

"Now be quiet—fill up for the ladies—they cant be amended—first drink to the ladies; when *they* call 'to arms,' let no *true soldier* hesitate to obey," screamed somebody, who, though near me, I saw only through a *mist*.

This toast was drunk in a bumper, every one turning his glass upside down, with emphatic *destructiveness*, when the laureate again began.

FURLOUGH SONG.

Air—"I'm not a lover now."

Lady! no cap is on my head,
No visor o'er my brow!
I've lost my plume—you've won my heart—
I'm not a soldier now.

My uniform, I've just put off,
My "Cits," I've just put on;
And *silk*, I've substituted for
The *leather* stock I've worn:
No more the sound of cannon, grates
Upon my ear, as when
It waked me up at break of day—
I was a soldier then.

But now without the reveillie,
I've learned to ope my eyes;
And I can, now, get up from tea,
Without the word to "rise;"
I've chang'd to "glancing at my dress,"
My "dressing at a glance;"
And 'form "the prompt manœuvre," when
"Advancing" up the dance.

I've torn my "differentials" up;
(The leaves—lud, how they flew!—)
And "Integrals" and "Algebra,"
Are out the window too:
The only "curvatures" I find,
Are of a *neck* or *brow*,
I've made my *arms*, my "assymtotes;"
My *lips*, my "tangents" now.

And if of wine, I wish to know
How much is in a cup;
I put it "level" with my mouth,
And "integrate" it—up:
The only "spirals" that I "form,"
Are twined about one.—How
Would Archimede or Sinon look,
Were they to see me now?

I've changed my "*co*-sines" all to "*verse*,"
(So did the muse require;)
To *boots*, my "logarithms"—for
They "raise" me somewhat *higher*.
Now, I can move without command,
Can sit up after ten;
Oh! how unlike my former days!
I was a soldier, *then*.

The "sextant" and "theodolite,"
Advance not *my* "survey:"—
The river's breadth,—the mountain's height,
I'll "take" another day;
But all my "measures" *now*, I *tread;*
I "sight," at ladies eyes;
My "observations," are *remarks;*
Mid *fish*, my "angling" lies. — — —

The poet made many vain attempts to continue his song, but found it impossible to distinguish the dancing letters through the hazy atmosphere, so he sat down muttering, "valeat res ludicra."

He had been frequently interrupted by bursts of applause, in which I also joined, though for what cause I could not comprehend. Now the most confused uproar ensued—some rose from table and staggered across the room, now and then stopping to embrace and hug one another.

Others, who were "completely done up," murmured, "let's go home—let us go to the barracks."

Dad, the poet, joined these last, and rose from his seat to "tread a devious way," as he said, "to dulce domum."

"Come Grubb, let's go—ah, Tremaine, is that you," continued he, "you are so changed with your (hic) disguise, that I would not have recognized you unless from your foot (hic) *Pedes*.

—— —— Nil fuit unquam
Sic dispar sibi —— ——.

Come, come let's go 'd—n the professors and all their successors,' (hic)—come my dear fellows,

Lusisti satis, edisti satis, atque bibisti,
Tempus abire tibi est.

come on Tremaine."

So saying he seized me by the hand, Kader and Doane following, and led me off. I remember nothing more of my virgin frolic.

* * * * * * * * *

On the next morning I found myself on my bed, tormented by a burning thirst, and almost craz'd by a bursting head. A high fever was on me, and conscience, conscience was sore in her upbraidings. What would my mother say, were she to know of my conduct? What will my father think, for he *must* know of it? These were awful reflections!

I rose to wash myself, for I *felt dirty*—but when I saw the ghastly expression and accumulated filth on my face, I shrunk back with disgust and humility.

"And is *this* the promised *pleasure*?" thought I.

THE NAVY.

It is greatly to be regretted, that so many errors in fact should be permitted, under the signature of various correspondents, to creep into your well designed Magazine. Errors in opinion are of a different character, and more likely to occur where discussion is open to all, as it should be, however inexperienced or ill-read.

Allow me to suggest, that original articles, making important allegations of fact, reflecting injuriously on the whole service, should, before printed, be ascertained to possess accuracy in those particulars; or otherwise this popular branch of the public defence and protection will be often exposed to unmerited odium—and the Magazine itself lose a reputation for correctness and industrious research.

Without being tedious I will now suggest two or three illustrations of the errors before alluded to.

1. In more than one instance assertions have been made and published, that the present seamen of the navy are not obtained without much difficulty, and are of an inferior character:—Whereas every person much conversant with the service, knows, and the reports and records of the naval department show, that never were seamen more easily obtained than during the last three years, and never did they possess a higher character for subordination, sobriety, and devotion to duty.

2. In other instances it has been stated, that the officers are not so well educated as formerly, and that professional science among them is declining:

Whereas, if any one would take the pains to enquire, he would ascertain, that the means of instruction, both on ship-board and at the principal yards, have of late years been increased, and every practicable caution taken to improve the younger classes in this way, and by leaves to travel and study in foreign countries. Although further advantages are feasible and might be useful, yet all who examine must be convinced, that it is incredible the present race of officers, now growing up, are less literary or scientific than those who preceded them with fewer advantages. The aspersion thus cast upon the rising hopes of the country, in the naval service, is believed to be entirely unmerited.

3. Another of your correspondents speaks lately "of the total absence of ships of war from the port of Philadelphia," and the neglect to employ the seamen of the Delaware bay and river in the navy:

Whereas, it was only the last autumn, that one ship of war was paid off at Philadelphia, and a rendezvous has been for years kept open during the time when seamen are wanted for the navy, at the port of Philadelphia, as well as elsewhere. Thus every sailor in the Delaware bay and river, has enjoyed the opportunity, in common with sailors elsewhere, and many of them have improved it, to enlist and serve under the star-spangled banner.

4. Another correspondent, in your very last number, is allowed to state, without contradiction or comment, that "the discipline and decorum of our navy have suffered in a lamentable degree, and have long been on the decline." This severe censure is cast on a corps of as gallant and honorable officers, as ever trod the deck of a man of war, and at a time when the harmony among them was never greater—the quarrels and trials never fewer, and the efficiency of the service never superior.

It is to be lamented, that such inconsiderate and ill founded strictures are admitted into a work, which has been hitherto so liberally patronized in that branch of the service, and that those abused are thus made to pay for the printing and circulation of such highly derogatory comments on themselves and the establishment to which it is their pride to belong.

The above are a few of the errors that have recently appeared in the Magazine on matters of fact. Those errors relating to questions of principle, or errors of mere opinion, may be noticed hereafter.

STODDARD.

REMARKS BY THE EDITOR.—It is generally understood, (or if it is not, it should be) that an editor does not, by the insertion of any communication, adopt or approve the various and frequently opposite sentiments of his correspondents; if he were guided by a policy so illiberal and short-sighted, as to exclude every thing which did not square with his own ideas, there would be an end to free discussion, and but little chance remain for arguments to be heard on both sides.

In the foregoing communication, our own judgment (or perhaps want of judgment) and the truth of our correspondents' statements are questioned. We must leave to them the task of defending themselves from the allegation of being in error as to matters of *fact*, and have no doubt they will be found ready; but we have a word to say as to our own course.

When communications are offered to us for insertion, upon the responsibility of those who have had opportunities for ascertaining the correctness of their assertions, who speak from their own knowledge of facts, and who would not wilfully lead others astray, we cannot perceive the propriety or necessity of our making enquiry to test the truth or falsehood of their allegations. Were this to be our rule, so much time would be lost in the attempt, and so much labor and delay involved in it, that very few communications would pass the ordeal in time to produce their desired effect.

Had those, upon which STODDARD animadverts, been anonymous, we should have felt the necessity of ascertaining their correctness, or calling for the names of the authors. But knowing the parties, and reposing confidence in their integrity, we published their remarks, without pretending to adopt or approve their opinions; and we will here observe that they belong to that profession, which they are charged with aspersing—have been long connected with it—and have its honor and welfare as much at heart as any other individuals, in or out of it. In fact their very solicitude for the character of the Navy, has been the occasion of their offering to the public the results of their experience, and their convictions of the wants of the service. If they are wrong, the same channel is al-

ways open for correction. The circumstance that several officers, wholly unknown to each other, should concur so nearly in their opinions and representations, is strong corroborative evidence that there is defect somewhere, which calls for a speedy and effectual remedy. These communications were not of our seeking; they were proffered by the writers voluntarily, and we are convinced that they had good and sufficient grounds for believing what they asserted. The charge of aspering the rising hopes of the country, by "such inconsiderate and ill founded strictures," is one of the last which can justly be laid at their door; their own reputation and feelings must suffer in common with the rest. After inviting Officers, in general terms, to become contributors, and informing them that the Magazine is open to all, upon whatever subject they may prefer to write, if we had refused to insert such communications, vouched for, too, as they were by the standing of their authors, our Magazine would very soon "lose a reputation for" *independence.*

Where would STODDARD have us go, to obtain the information which he deems essential? To the Navy Department? This is precisely the place, to which, under the circumstances of the case, we should not go. It was to promulgate facts, presumed not to be known at the Department, or to the public generally, but which were known to the authors, that the communications in question were written; and if these facts were not previously known, it is conclusive evidence that such a medium as the Magazine has been long wanted.

We acknowledge the importance of exercising a sound discretion, upon the various articles offered for insertion. We may have erred—it is the lot of humanity—but we have ever aimed to do justice 'without favor, fear, affection or partiality.' Individually, we yield to no one, in admiration of the feats of our gallant Navy, in a desire to promote its usefulness and welfare, or in a reliance upon the chivalry and honor which belong, in an eminent degree, to the members of it. But if there be defects either in the system itself, or in the administration of its affairs, we cannot remove them by shutting our eyes. We have no need to imitate the ostrich, which thinks that if the head be concealed in the sand, the body is safe from the hunter. It is far better to face the danger, wherever it exists, and vanquish it if we can.

We ask not to be shielded from the effects of our own imprudence or ill judgment, under the plea of good intentions; therefore the equivocal compliment of "well designed Magazine" might as well have been spared. But not to be outdone in good deeds, we take leave to correct a misapprehension of our correspondent STODDARD, wherein he speaks of the Magazine having "been so liberally patronized in that branch of the service." Of 1092 officers, composing the Naval establishment, as appears by the official Register for 1834, only 147 are at this time [20 March] known to be subscribers. We might retort the suggestion, that "allegations of fact" should "be ascertained to possess accuracy;" but as the small proportion of subscribers in the Navy was not known to the writers of the communications, and had not the slightest influence with us in determining upon their insertion, and as we have good reasons for believing that the number will very soon be more than doubled, we will let that pass without further comment.

PROVIDENT SOCIETY.

FORT TOWSON, C. N.

At a meeting of the officers of the 3d Regiment of Infantry, stationed at Fort Towson, C. N. on the 1st of February, 1834, it was unanimously resolved, that it is desirable a society should be formed, and a fund raised, for the following purposes, viz:

1st. For the support of aged or infirm officers of the army, who may retire, or be disbanded.

2d. For the support of widows and children of deceased officers, who may die in service.

3d. For securing to such officers who may be disposed to resign, an annuity, and in case of their decease, for securing it to their widows and children.

4th. That the fund to be raised for the above purposes be obtained by an assessment of a certain per cent. on the pay proper of the officers of the army.

5th. That delegates be appointed, either by members of Regiments, or Posts, as well as by the General and Medical Staff, to meet in convention to form a constitution.

6th. We recommend that the convention meet at Pittsburgh or Philadelphia, Pa.

7th. We hereby pledge ourselves, to accord a cheerful support to any society that may be formed, having these objects in view, and to become members.

8th. That the foregoing proceedings be sent to the Editor of the Military and Naval Magazine, for publication.

J. H. VOSE, Lt. Col. 3d Inf.
J. S. NELSON, Capt. 3d Inf.
J. B. CLARK, Capt. 3d Inf.
J. DEAN, Capt. 3d Inf.
H. BAINBRIDGE, 1st Lt. 3d Inf.
A. G. BALDWIN, 2d Lt. 3d Inf.
E. B. ALEXANDER, 1st Lt. 3d Inf.
JAMES R. STEPHENSON, 1st Lt. 7th Inf.
B. R. HOGAN, Ass't. Surg. U. S. A.

BATON ROUGE, LA.

Memorial to the Senate and House of Representatives of the United States of America, in Congress assembled, from the officers of the Army of the United States, stationed at Baton Rouge, La.

Whereas, your memorialists understand that your Honorable Body are about to pass an act of incorporation, for a "Provident Society," founded upon a certain per centum deduction, from the pay of the officers of the army, &c. under the impression that has gone forth, that it is the general wish of the army;—Your memorialists, therefore, most respectfully beg leave to represent: that the wishes of the army have not been ascertained upon this subject—that the passage of such an act will not improve its condition—and to remonstrate against any legislative provision, for such purpose.

Your memorialists conceive the project to be impracticable, for reasons assigned in a memorial, presented to your Honorable Body by the officers of the army, stationed at West Point;—and your memorialists do further deem, that an act of the kind contemplated, would be unjust towards the officers of the army, for the reasons,—that it would take from their pay a sum which they can illy afford—unnecessarily restrict and define their charities—and deprive them of the *moral claim* they have upon the government for support, when old age and infirmity shall unfit them for the performance of duty. It is a principle which

has obtained in other countries, (and we believe that your Honorable Body will admit the truth of the moral obligation,) that when the public servants, have been worn out in camps, and such exposure as incidentally occur in army service—and frequently from their very faithfulness in the discharge of their duties, are brought prematurely to the close of their usefulness,—having sacrificed, for the sake of those duties, all opportunity for obtaining a competency, as well as the spring time of life, and the vigor of manhood, that they should be supported at the public expense, either by being permitted to retire on half pay, or in such other way as may be deemed advisable by the government.

Your memorialists do not wish to do aught, which may even have a remote tendency to destroy the prospect of such a principle being brought into the relation of the officer and soldier to the country;—more especially at this present time would it be unadvisable for the army (were it at all practicable so to do) to take upon themselves, the responsibilities and obligations, which attach to the *whole country*, when we are anticipating an overflowing treasury.

Your memorialists might urge many other reasons for being opposed to the proposed act, but do believe, that it will have all and proper consideration with your Honorable Body;—and as in duty bound will ever pray.

J. M. GLASSELL, Maj. Commanding.
HENRY WILSON, Capt. 4th Inf.
R. M. SANDS, Capt. 4th Inf.
WM. S. NEWTON, 3d Art.
WM. MARTIN, 1st Lt. 4th Inf.
F. L. JONES, 1st Lt. 4th Art.
F. D. NEWCOMB.
R. B. SCREVEN, 2d Lt. 4th Inf.
ROBERT C. BUCHANAN, 2d Lt. 4th Inf.
C. H. LARNED, 2d Lt. 4th Inf.
BENJAMIN ALVORD, Bvt. 2d Lt. 4th Inf.
A. C. MYERS, Bvt. 2d Lt. 4th Inf.
H. L. SCOTT, Bvt. 2d Lt. 4th Inf.
B. F. HARNEY, Surgeon.

JEFFERSON BARRACKS.

FEBRUARY 18th, 1834.

At a meeting of the officers of the United States Army, at Jefferson Barracks, (Mo.) on the 18th February, 1834, a communication from a committee of the officers of the United States Army, at West Point, was submitted, giving information that a bill for the establishment of a Military Provident Society, was under consideration in the House of Representatives, a committee was appointed with instructions to draw up a report, which should be of the nature of a protest against the passage of the said bill.

The meeting adjourned to the 19th inst., when the accompanying report of the Committee being submitted, was unanimously adopted.

At a meeting of the officers of this post, on the 18th inst., for the purpose of taking into consideration the plan, which has been proposed in the House of Representatives at Washington, for creating a fund for the benefit of the widows and orphans of deceased officers of the army, by a stoppage of two and a half per centum from the pay of each officer, the undersigned were appointed a committee to report thereon, and having maturely considered the subject, submit the following:—

1. We are of opinion, that the project is impracticable, without deducting from the pay of the officers of the Army, a sum much larger than the present rate of compensation would allow: in support of this, we beg leave to refer those concerned, to the report of a board of officers, which met for the consideration of the subject, in Washington city, in 1828; this report, which was founded on actual calculations, would, we believe, be satisfactory to all.

2. We are of opinion, that the plan is impolitic; for it is well known that a sum of money may be secured for an officer's widow and orphans, at a much cheaper rate, than by the method proposed, viz: by insurance on the life of the individual.

3. The plan proposed would appropriate a portion of the pay of more than one half of the officers of the army, to the exclusive benefit of the remainder; and this too in many cases, *contrary to the wishes of those interested;* nor are we willing to believe, that any officer would consent that his family should receive the benefit of such involuntary contributions.

4. We are of opinion, that the plan proposed, would, in many cases, operate unjustly; such cases are known to your committee; there are officers in the army, upon whom relatives rely solely for their support, and who would gain no advantage from the proposed measure.

To conclude,—we are decidedly opposed to the proposed plan, as being inconsistent with the institutions of our country—uncalled for by the necessities of the army, and repugnant to our feelings.

D. BAKER, Lt. Col. 6th Inf.
S. W. KEARNY, Lt. Col. Dragoons.
THOMAS NOEL, Capt. 6th Inf.
S. G. J. De CAMP, Surgeon U. S. Army.
T. B. WHEELOCK, 1st Lt. U. S. Dragoons.

On motion, it was resolved, that a copy of the reports, together with the proceedings of the meeting be forwarded to the Speaker of the House of Representatives, with a request that it should be laid before the House.

H. ATKINSON, Br. Gen. U. S. Army.
D. BAKER, Lt. Col. 6th Inf.
S. W. KEARNY, Lt. Col. Dragoons.
THOMAS NOEL, Capt. 6th Inf.
J. ROGERS, Capt. 6th Inf.
S. G. J. De CAMP, Surgeon U. S. Army.
L. M. NUTE, 1st Lt. 6th Inf.
W. HUGHEY, Ass't. Surgeon U. S. Army.
M. W. BATEMAN, 1st Lt. 6th Inf.
GEO. ANDREWS, 1st Lt. 6th Inf.
G. H. CROSMAN, 1st Lt. 6th Inf.
J. V. SWEARINGEN, 1st Lt. 6th Inf.
T. B. WHEELOCK, 1st Lt. Dragoons.
F. J. BROOKE, 2d Lt. 6th Inf.
N. J. EATON, 2d Lt. 6th Inf.
A. CADY, 2d Lt. 6th Inf.
T. L. ALEXANDER, 2d Lt. 6th Inf.
JAS. S. WILLIAMS, Bt. 2d Lt. 6th Inf.
J. EDWARD BLAKE, Bt. 2d Lt. 6th Inf.
J. P. CENTER, Bt. 2d Lt. 6th Inf.
GEO. H. RINGGOLD, Bt. 2d Lt. 6th Inf.
JOSEPH P. HARRISON, Bt. 2d Lt. 6th Inf.

FORT DEARBORN, ILLINOIS, 3d March, 1834.

To the Honorable the Senate and House of Representatives, in Congress assembled:

Your petitioners would most respectfully represent, that they have been informed, by a circular from West Point, of the introduction of a bill into the House of Representatives for the passage of an act, to create a *Provident* or *Pension fund*, by a *tax* on the pay of all officers of the Army. Believing, as we do, that the passage of *such* an an act, for *such* a purpose, would be an infringement of our individual and *private* rights, guaranteed to us in common with all the citizens of our country: And further, that it would *fail*, or worse than fail,

in the very charitable end it purposes, we think we need no argument to prove, after the very *able* investigation and expose of the *Provident Society scheme*, recently made and published by our brother officers at West Point: We, the undersigned, do therefore, beg leave most earnestly, to remonstrate against the passage of any such act. All of which is most respectfully submitted.

J. GREEN, Major 5th Inf.
D. WILCOX, Capt. 5th Inf.
J. M. BAXLEY, Capt. 5th Inf.
L. T. JAMISON, Lt. 5th Inf.
E. K. SMITH, Lt. 5th Inf.
J. L. THOMPSON, Lt. 5th Inf.
P. MAXWELL, Asst. Surgeon.
J. ALLEN, Lt. 5th Inf.

RELATIVE RANK.

"An old soldier," in your last number, after stating the relative rank between officers in the Army and Navy proposed in the new regulations, remarks, that "from this comparison of Army and Navy rank it would appear, that the relative rank of the officers of the American Army is misunderstood by the Navy Department and Board."

This is remarkably modest in the "old soldier," when the doings of the Board of Revision, and not the Navy Board or Navy Department, as to this subject, were revised by the President himself —a distinguished officer in the Army, and probably as old a soldier as the "old soldier" himself.

In addition to this, the comparative rank, in some of the particulars objected to, is copied, almost *verbatim et literatim*, from the regulations of A. D. 1818, and which regulations on this point, were the result of an agreement between the Army and Navy Departments; and it is to be presumed that the *Army* Department at least understood, then, the relative rank of its own officers, as well as an "old soldier" does now.

AN OLD SAILOR.

HYDROGRAPHY.

GRAHAM'S ISLAND IN THE MEDITERRANEAN.—The following is an account of a recent survey made of the Volcanic Island, which, in 1831, rose from the sea between the islands of Pantalaria and Sicily:—"The Volcanic Island, which has ceased to appear in the canal of Malta, has left in the same place a dangerous shoal of an oval figure, about three-fifths of a mile in extent, having its longest diameter in the direction from S. S. E. to N. N. W., and being something less in size than the base of the island itself when visible. The upper surface is composed principally of black stones, and some of a darkish yellow, exactly like those observed round the crater of the volcano, with a sprinkling of sand here and there. In the centre is a black rock of the diameter of about twenty-six fathoms, over which there are eleven feet of water, with the exception of two points in the line from N. E. to S. W., which have a depth of only nine feet. At the distance of sixty fathoms from the central mass, there are two and a half, three, four, five, and six fathoms water, the depth of which

increases with the distance. At seventy-five fathoms from the S. W. of the central rock, there is a small detached rock with fifteen feet water over it. In every direction around this danger the depth is great. Neither the barrel placed there by Captain Swinburne, in 1832, and which could scarcely make any resistance, nor the discolored water observed by him, are any longer to be seen. By means of a tolerably correct survey, made with an exact azimuth compass, the vessel being in the direction of the shoal (upon which a boat was stationed), and the highest part of the island of Pantalaria, these two points were seen bearing N. 54 degrees E. and S. 54 degrees W. The latitude of the point upon which the boat was moored, was found to be 37 degrees 10 minutes N.; and with the assistance of a chronometer, whose daily progression was precisely known, the longitude was fixed at 12 degrees, 44 minutes, 59 seconds E. of Greenwich. The latitude of the volcano, taken by Commander W. Smith, of the English brig-of-war Philomel, when in a state of eruption, was 37 deg. 11 min. N., and the longitude 12 deg. 44 min. E."

United Service Journal, Dec. 1833.

THE SUNKEN ROCK.—Captain R. Owen, of the British Navy, having been despatched to ascertain the true position of the Sunken Rock* off the Bahamas, on which the British brig Lorton struck last summer, has recently imparted the following information respecting it to Lieut. Governor Balfour. It should be premised that Captain Duncan, of the Lorton, described the rock in his protest as being situated about eight or nine miles in a N. by W. 1-2 W. from Egg Island, and asserted that it was not laid down in any chart:—

It is on the edge of the Reef, says Captain Owen, to the northward of Royal Island, with the undermentioned magnetic bearings and distances—The highest part of Egg Island bears S. 11—30 W. distant 2 1-8 miles.—The eastern part of Royal Island bears S. 36—30 E. distant 1 mile and 8-10ths, and the nearest part of Golding's Cay (or what the fishermen call Iglamalus Rock) bears S. 77 E. distant 1 mile and 1-10th. Golding's Cay is where the master of the Lorton landed with the crew after the brig had struck, and which he deposes in his protest as being *ten miles!!* from the Rock on which the brig was wrecked.

The position of this Rock is so completely at variance with the master's protest, that I should have doubted the numerous accounts that I received of its position from several persons who were on board of her while she was on the rock, had I not fortunately been enabled to place it beyond all question, by recovering from the bottom, in my boat, an iron water pipe, weighing about half a ton, that had been thrown overboard from a schooner of this port, when lashed alongside the brig while she was upon the rock. The existence of this danger has been long known, and is marked in all the charts of that neighborhood that I have seen.

*See Military and Naval Magazine, Vol. 2, Page 219.

NORTH MAGNETIC POLE.—At a meeting of the Royal Society, on Thursday evening last, a memoir was read from Captain Ross, of the North Magnetic Pole. He began by stating the importance attached to the solution of this perplexing problem, assigning as the chief impediments to its investigation hitherto, the unequal distribution of magnetic influence, and the difficulty of approaching the magnetic foci. Great advances, however, had been made. Professor Farraday all but demonstrated the identity of magnetism and electricity; the observations of Sabine, Franklin, Parry, Foster, &c., had shown in what direction the point of magnetic concentricity was to be sought. Before leaving England, Captain Ross had obtained from the Admiralty a dipping needle constructed by Jones, whose accuracy had been tested in previous expeditions. From some defect in the vertical circle, the observations made prior to 1831 are not very perfect, but that defect was remedied when discovered.

The table of observations showed that the differences of observations were remarkable and great, but they also proved the tendency of errors to correct each other. When from these observations, the direction in which the magnet-

ic pole should be sought had been determined with tolerable precision, it was feared that it could only be approached by a land journey, the accomplishment of which was beyond the limited powers of the expedition. But these fears were dispelled by the discovery of the Great Western Ocean. The party first sent to explore brought back only some imperfect indications of the object of their search, because they could only take with them a small supply of instruments; but when it appeared that another winter should necessarily be spent in these regions, Captain Ross made the necessary preparation for a more accurate survey. In May, 1831, he landed on the coast and by a series of observations determined the place of the magnetic meridian, and, at least approximately, the position of the magnetic pole. Captain Ross detailed minutely, all the tests used to determine that the place where he stood was the point of magnetic centricity, and, so far as the evidence of instruments are decisive, the fact of the discovery was established. But he candidly added, that further investigations were necessary, and more especially accurate observations to the northwest and southwest of the place indicated, to ascertain the limits of error. These investigations he deemed an object worthy of national attention, because magnetism was peculiarly a British science. Besides ascertaining the positions of the pole, it would be also of importance to determine its diurnal and annual motion, and its periodic variation, if any such exist. The place ascertained to be either the precise spot, or one in its immediate vicinity, was easily attainable; and he expressed his hopes that the British flag would soon wave on the magnetic pole. In the course of this interesting paper, Captain Ross paid a merited compliment to the generous and liberal conduct of Felix Booth, Esq. by whose aid chiefly, the gallant officer was enabled to proceed on his important enterprise.

London Athenæum.

ORDER, No. 21.

HEAD QUARTERS OF THE ARMY,
ADJUTANT GENERAL'S OFFICE,
Washington, March 12th, 1834.

I—The following named officers, now on various detached service, either not having served three years with their respective Regiments; or, having been on extra duty for a longer period than two years, will, in conformity with the provisions of "Order" No. 48, of May 18th, 1833, be relieved on the 1st of May, when they will proceed to join their respective Companies.

FIRST REGIMENT OF ARTILLERY.
1st Lt. L. B. Webster, - M. Academy.
1st Lt. J. R. Irwin, - Eng. duty.
2d Lt. E. S. Sibley, - Eng. duty.
2d Lt. H. G. Sill, - Top. duty.

SECOND REGIMENT OF ARTILLERY.
1st Lt. C. F. Smith, - M. Academy.
2d Lt. G. W. Ward, - Top. duty.
2d Lt. J. C. Vance, - Eng. duty.

THIRD REGIMENT OF ARTILLERY.
1st Lt. W. B. Davidson, A. G. Office.
1st Lt. Z. J. D. Kinsley, M. Academy
2d Lt. B. Poole, - Top. duty.

FOURTH REGIMENT OF ARTILLERY.
1st Lt. G. W. Long, - Eng. duty.
1st Lt. R. C. Smead, - Eng. duty.
2d Lt. M. C. Ewing, - Top. duty.
2d Lt. J. N. Macomb, Top. duty.
2d Lt. A. Brush, - Eng. duty.

SECOND REGIMENT OF INFANTRY.
1st Lt. S. P. Heintzelman, Top. duty.
Bt. 2d Lt. J. V. Bomford, Eng. duty.

THIRD REGIMENT OF INFANTRY.
2d Lt. J. H. Taylor, M. Academy.

FOURTH REGIMENT OF INFANTRY.
2d Lt. W. Hood, - Top. duty.

FIFTH REGIMENT OF INFANTRY.
Captain T. Hunt, C. G. S. Office.
Bt. 2d Lt. T. Stockton, Eng. duty.

SIXTH REGIMENT OF INFANTRY.
2d Lt. T. F. Drayton, Top. duty.

SEVENTH REGIMENT OF INFANTRY.
2d Lt. A. M. Lea, - Top. duty.
2d Lt. G. W. Cass, - Eng. duty.

II.—The officers on duty at the Military Academy, will not be relieved until after the June examination, unless otherwise specially directed.

By order of Major General Macomb:

R. JONES, *Adj't Gen.*

ORDER, No. 23.

HEAD QUARTERS OF THE ARMY,
ADJUTANT GENERAL'S OFFICE,
Washington, March 19th, 1834.

The following amendment to the Regulations for the Medical Department, has been received from the War Department, and is published for the information of those interested:—

WAR DEPARTMENT, March 17th, 1834.

Paragraph 57.—The assignment of Surgeons and Assistant Surgeons to Regiments and Posts, will be made by the Secretary of War. When the circumstances of the service will permit, those who shall have served three years in their respective grades, shall have choice of stations agreeably to rank, on written application through the Surgeon General's Office, stating the reasons therefor; but no one will be transferred from the Post to which he may have been assigned, for the purpose of making room for another.

LEW: CASS.

By order of Major General Macomb:
S. COOPER, *Asst. Adjt. Gen.*

NAVAL INTELLIGENCE.

MEDITERRANEAN.—*Extract of a letter to the editor of the Military and Naval Magazine, from an officer on board the Delaware* 74, *dated*

PORT MAHON, 23*d January*, 1834.

"We are looking daily for Commodore Patterson; the last accounts are indirect, and state that he left Smyrna, bound here, on the 13th ultimo, and on the 14th received some injury during a heavy gale, in which was lost the French 74 gun ship La Superbe—10 lives lost. The schooner Shark has been here, and left for Malta and Smyrna. We enjoy good health."

WEST INDIES.—The ship St. Louis, Captain Newell, arrived at St. Thomas, on the 26th February, 13 days from Havana—all well.

Ship Falmouth, Captain Spencer, sailed from New York on the 12th, and arrived at Norfolk on the 15th March, to complete her crew; bound to the West Indies.

BRAZIL.—Ship Ontario, Captain Salter, arrived at Rio on the 24th January, from Norfolk.

U. S. ship Peacock, Captain Geisinger, arrived at Rio de Janeiro on the 17th January, 1834, from India, the Red Sea, and the north-eastern part of Arabia Felix, via Mozambique, and 25 days from the Cape of Good Hope.

List of Officers—All well.

Commander—David Geisinger. *Lieutenants*—Robert B. Cunningham, H. Y. Purviance, Thomas T. Craven, Arthur Sinclair, acting, Thomas W. Brent, do. *Purser*—Francis B. Stockton. *Surgeon*—Benajah Ticknor. *Acting Sailing Master*—Wm. H. Brown. *Lieutenant of Marines*—Henry W. Fowler. *Midshipmen*—John De Camp, David R. Crawford, Henry T. Wingate, Augustus S. Baldwin, Alexander H. Wells, Charles Thomas, George R. Carroll, William Reynolds. *School Master*—Horatio N. Robinson. *Acting Gunner*—John Barr. *Acting Boatswain*—George W. Peabody.

U. S. Schooner Boxer parted company two days out from Cape Town, Cape of Good Hope, and arrived at Rio de Janeiro, 19th January, 1834.

List of officers—All well.

Lieut. Commanding—Wm. F. Shields. *Lieutenants*—Timothy G. Benham, Charles H. Poor, acting. *Acting Sailing Master*—George Hurst. *Assistant Surgeon*—Edward Gilchrist. *Midshipmen*—Enoch G. Parrott, John Mooney, John B. Weed. *Captain's Clerk*—James Maher. *Acting Gunner*—Joshua M'Nelly.

Ship Natchez, Captain Zantzinger, sailed from Rio for Montevideo, previous to the 29th January.

The U. S. schr. Enterprize arrived at Buenos Ayres on the the 24th December, 1833, last from Monte Video, where she left the U. S. ship Lexington, Commodore Woolsey. The Lexington was waiting the arrival of the Ontario from the U. S. when she would leave for home immediately. The Enterprize is also to return to the U. S. very soon.

PACIFIC.—The Vincennes, Commodore Wadsworth, arrived at Rio Janeiro on the 3d January, 58 days from Norfolk.

EXAMINATION OF MIDSHIPMEN.

A Board for the examination of Midshipmen, whose warrants bear date prior to the first of January, 1829, will be convened at Baltimore, on the first Monday in May next.

It is expected that all who are entitled to an examination, under the regulations of the Department, will attend at the above-mentioned time and place, and report to Commodore JACOB JONES, President of the Board.

LEVI WOODBURY.

Navy Department, March 10th, 1834.

EXAMINATION OF ASSISTANT SURGEONS.

A Board of Naval Surgeons, composed of Dr. Baily Washington, President, and Drs. L. Osborne and T. J. Boyd, members, assembled at Washington on the 3d February, and adjourned on the 22d of the same month.

The following Assistant Surgeons were examined and found qualified for promotion:—Mifflin Coulter, William Whelan, Samuel Barrington, Thomas L. Smith, H. N. Glentworth, and Lewis B. Hunter.

RESIGNATIONS.

David Deacon, Midshipman, 10th March, 1834.
Williams Carter, Midshipman, 15th March, 1834.

DISMISSAL.

Rhydon G. Moore, Midshipman, 28th February, 1834.

Marriages.

In Washington, on the 12th Feb. Major HENRY STANTON, of the Quarter Master's Department, U. S. A., to Miss ALEXANDRINE MACOMB, daughter of Major General A. Macomb.

On the 12th Dec. last, at Gloria Hill, near Rio de Janeiro, Brazil, Lieut. EDWARD B. BOUTWELL, of the U. S. Navy, to Miss DOROTHEA ANN, third daughter of John M. Baker, Esq. U. S. Consul at Rio de Janeiro.

In Savannah, Geo., on the 5th Feb. Lieut. HUGH W. MERCER, of the 2d Art. U. S. A., to Miss MARY ANDERSON, daughter of Geo. Anderson, Esq. of that city.

In New Orleans, on the 1st March, Major R. A. ZANTZINGER, of the U. S. Army, to Mrs. MARY E. JOHNSON, daughter of Benjamin Bullit, Esq. of Natchitoches, Lou.

Deaths.

In Prince George's Co., Md. on the 10th Feb., Lieut. JOSEPH CROSS, of the Navy.

At Philadelphia, on the 7th Feb. in the 66th year of her age, Mrs. MARY MURRAY, relict of Commodore Alexander Murray, for many years senior officer of the U. S. Navy.

In Charleston, S. C. on the 7th Feb. Lieut. JOHN A. COOK, of the Navy, aged 38.

In Washington, Pa. on the 18th Feb. Lieut. JOSEPH RITNER, of the 4th Inf. U. S. Army, and recently Professor of Civil and Topographical Engineering in Washington College.

In Philadelphia, on the 3d March, JAMES, infant son of Lieut. J. L. Lardner, of the Navy, aged 14 months.

At Williamsport, Md., on the 5th March, Captain M. A. PATRICK, of the 1st Artillery.

At Portsmouth, N. H. on the 11th March, Mrs. ELIZA RICE TURNER, aged 21, wife of Captain Daniel Turner, of the Navy.

At sea on board the U. S. ship Peacock, on the 21st Oct. 1833, Midshipman LEWIS H. ROUMFORT.

METEOROLOGICAL JOURNAL, FOR THE MONTH OF FEBRUARY, 1834.

Kept at the Depot of Naval Instruments, Washington City.

Moon's Phases.	Day.	Barometer.	Temperature Max.	Temperature Min.	Dew Point	Weather.	Wind. Direction.	Wind. Force.	Rain. inches	REMARKS.
	Sat. 1	30.050	38	29	—	hail, cloudy, hail,	N E	strong		Mean height of the Barometer, during the month, In. 30.113
	Sun. 2	30.255	48	28	33	clear, clear, clear,	S W	light		
	Mon. 3	30.290	50	31	32	clear, clear, clear,	S & W	light		
	Tues. 4	29.925	51	30	33	clear, cloudy, cloudy,	S & W	moderate		Mean maximum temperature, 52° 8
	Wed. 5	29.895	50	36	30	clear, clear, clear,	S & W	light		
	Thur. 6	30.020	50	33	30	clear, clear, clear,	S & W	light		Mean minimum " 37° 55
	Fri. 7	30.060	50	33	40	cloudy, clear, cloudy,	N & W	light		
New M.	Sat. 8	30.333	40	26	28	cloudy, cloudy, cloudy,	N & E	moderate		Mean dew point, 42° 9
	Sun. 9	29.912	38	34	—	cloudy, misty, misty,	Calm			
	Mon. 10	30.018	50	33	36	cloudy, clear, cloudy,	N E	moderate		
☾apog.	Tues. 11	30.093	55	35	38	clear, clear, cloudy,	S & W	light		
	Wed. 12	30.380	50	36	31	cloudy, clear, clear,	North	fresh		
	Thur. 13	30.167	55	40	43	cloudy, cloudy, clear,	S & E	moderate		
	Fri. 14	29.945	58	39	43	hazy, cloudy, clear,	S & W	light		
	Sat. 15	29.682	63	48	55	hazy, cloudy, cloudy,	South	strong		
1st Qr.	Sun. 16	30.048	66	47	55	clear, cloudy, clear,	N W	light		
	Mon. 17	30.365	56	53	—	rain, cloudy, rain,	N E	moderate		
	Tues. 18	30.585	55	48	44	clear, clear, cloudy,	S & E	light	.5	
	Wed. 19	30.338	53	42	—	mist, mist, rain,	N W	light		
	Thur. 20	30.151	59	42	49	clear, clear, mist,	W—N E	light		
	Fri. 21	30.105	57	45	48	clear, cloudy, cloudy,	S W	light		
	Sat. 22	30.100	56	41	—	cloudy, mist, mist,	N E	light		
Full M.	Sun. 23	30.040	58	43	—	cloudy, cloudy, rain,	N E—N W	light	.35	
	Mon. 24	30.095	60	48	—	rain, rain, rain,	N E	light		
	Tues. 25	30.000	59	41	50	cloudy, cloudy, rain,	S & W	light	.6	
	Wed. 26	30.266	47	27	30	clear, cloudy, clear,	N W	strong		
	Thur. 27	30.156	53	29	39	clear, cloudy, clear,	West	light		
	Fri. 28	29.930	54	34	42	clear, clear, clear,	S W	light		